The Retirement Income System in Canada: Problems and Alternative Policies for Reform

A Summary of the

Report of the Task Force

on Retirement Income Policy

1979

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FOREWORD

In response to a growing concern among many groups about the current and future well-being of Canada's elderly, the federal government in 1976 established an interdepartmental task force of officials to undertake a study of the private and public retirement income system in this country.

Designated as the Task Force on Retirement Income Policy, the group sought to describe and evaluate the present retirement income system in Canada and to develop alternative approaches for resolving or minimizing the shortcomings in the system revealed by the analysis. The report of the Task Force did not adopt specific recommendations, but rather outlined a range of policy choices available to decision makers concerned with reforming the system now in place.

The Task Force functioned under the general direction of a steering committee of senior officers from the Departments of Finance, National Health and Welfare, Insurance and Labour and from the Privy Council Office and the Treasury Board Secretariat. The Task Force itself was headed by Harvey Lazar.

The report to the federal government, for which the Task Force is responsible, is being made available to the public in the hope that it will improve public understanding and encourage public debate of possible reforms to the retirement income system.

Since the report and its appendices are lengthy, the following summary has been prepared for the convenience of those wishing to have an overview of the work of the Task Force.

THE RETIREMENT INCOME SYSTEM IN CANADA: PROBLEMS AND ALTERNATIVE POLICIES FOR REFORM

SUMMARY

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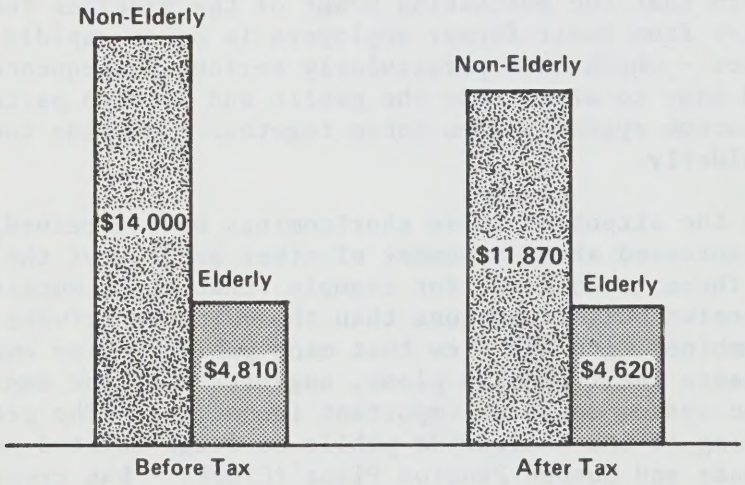
A brief discussion of the income situation of the current elderly and of the growing proportion of elderly in the population provides a convenient starting point for this summary.

A. The Income Situation of the Elderly

Figure 1 shows that the reported incomes of the elderly are lower than those of the non-elderly. The average income of the elderly, before taxes, is only about one-third of that of the non-elderly; on an after-tax basis the corresponding figure is about 40%. With allowance for wealth and variations in family size, the gap between the elderly and the non-elderly narrows but remains substantial.

FIGURE 1

Average Money Income of the Elderly and the Non-Elderly, 1975



There is also evidence that many of the elderly are less well off now than they were before their retirement. In 1978, benefits from the Guaranteed Income Supplement (GIS), a program designed to alleviate poverty among the elderly, were paid to 54% of those age 65 and over. This indicates that over half of the elderly had per capita incomes between $3,100 and $4,600 in that year. For those in this group who spent much of their lives before their 65th birthday in receipt of social assistance and/or with very low earnings, retirement incomes in this range could well mean higher living standards after retirement than before.(2) But the very

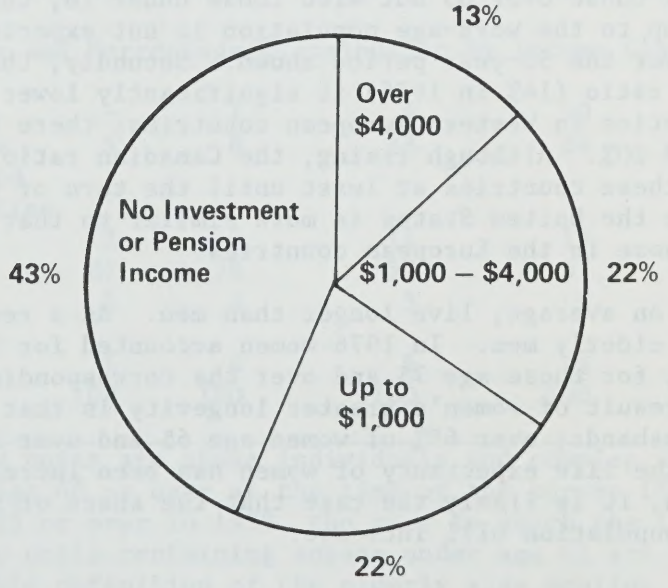
(2)Some provinces supplement the federal Old Age Security (OAS) and GIS benefits, thus raising the incomes of GIS recipients living there.

large proportion of the elderly with retirement incomes in this range suggests that many whose incomes were not low during their working years experienced significant reductions in their levels of well-being in retirement.

This impression is strengthened when it is recognized that elderly people who were in middle-income ranges before retirement, and who have full pensions from the C/QPP, are less well off in retirement than they were during their working years if they have no income from an employer-sponsored pension plan or from investments. The data portrayed in Figure 2 indicate that almost two out of three elderly family units reported less than $1,000 in income from investments and from employer-sponsored pension plans in 1975. Together, these facts indicate that some substantial proportion of the elderly are less well off now than they were before they retired.

FIGURE 2

Investment and Private Pension Income of the Elderly, 1975



B. Demographic Projections

The fact that the proportion of the elderly in the population is expected to increase significantly - perhaps doubling over the next half-century - is a second important factor that has been a source of concern. Column 1 of Table 1 shows that the number of those 65 and over as a percentage of those of working age is projected to increase from 14% to 18% at the turn of the century, and to jump to 29% by 2026. (These projections are based on relatively low birth rate and immigration assumptions and, therefore, may well overstate the extent of these increases.)

Table 1

Those in Ages of Dependency as Percentage of those Aged 18 to 64

Year	Age 65 and Over	Age 65 and Over Plus Under 18
	(%)	
1976	14	67
2001	18	55
2026	29	64

Assumptions: Birth rate 1.8; net annual immigration 100,000.

The very dramatic change in the first column of the table should be put in perspective by noting firstly, as the second column of Table 1 shows, that when those in ages of dependency are defined to include not only those over 65 but also those under 18, the ratio of this larger group to the work-age population is not expected to change significantly over the 50-year period shown. Secondly, the Canadian aged-dependency ratio (14% in 1976) is significantly lower than the corresponding ratios in Western European countries; there the ratios are generally around 20%. Although rising, the Canadian ratio will remain below those in these countries at least until the turn of the century. The situation in the United States is more similar to that in Canada than it is to those in the European countries.

Women, on average, live longer than men. As a result, elderly women outnumber elderly men. In 1976 women accounted for 56% of those age 65 and over; for those age 75 and over the corresponding figure was 61%. A second result of women's greater longevity is that they often outlive their husbands; over 60% of women age 65 and over in 1976 were single. Since the life expectancy of women has been increasing faster than that of men, it is likely the case that the share of single women in the elderly population will increase.

II. A BRIEF DESCRIPTION OF CANADA'S RETIREMENT INCOME SYSTEM

Table 2 shows the income by source reported by those aged 65 and over in 1975. The three nationwide public pension programs - OAS, GIS and C/QPP - accounted for more than half of the income of the elderly. All employer-sponsored pensions and annuities accounted for only 12%. More than half of these latter pensions are paid by employers in the public sector, with the result that over 60% of all of the income of the elderly flows from governments or from public sector employers. Investment income accounted for 21% of the income of the elderly. (The data lying behind Table 2 come from the Survey of Consumer Finance, 1975. No information is collected in this survey on the value of imputed rent associated with owner-occupied housing, of intra-family transfers or of subsidized services.)

Table 2

Average Income and Sources of Income of Elderly Family Units, 1975(1)

Income Source	Less Than $2500	$2500-3999	$4000-5999	$6000-8999	More Than $9000	All Income Classes
Estimated number of recipient units (000s)	227	458	209	146	113	1,153
Percentage of total	20	40	18	13	10	100
Average income for recipient units in class	$1,759	$2,998	$5,026	$7,254	$14,643	$4,807
Sources of Income and Percentage Distribution by Income Class						
Total earnings	-	1	5	10	25	11
Investment income	5	8	18	24	37	21
Employer-sponsored pensions, annuities etc.	2	5	11	19	17	12
OAS/GIS	87	78	57	37	16	48
C/QPP	2	3	5	5	3	4
Other gov't transfers	4	4	5	5	2	4
Total income	100	100	100	100	100	100

(1)Elderly family units are those individuals and couples where both spouses were age 66 or over at the time of the survey (Spring 1976) and thus age 65 or over in 1975, the year to which the income data apply. Family units containing anyone under age 65 are excluded from the table. This definition of the elderly also applies to Figure 1.

Note: Numbers may not add due to rounding.

A. The Public Pension System

Among Canada's three main nationwide public pension programs, the oldest and largest is the Old Age Security program. This program pays a flat rate pension to all those 65 and over, subject only to a residency requirement. This federal program began in 1952, replacing a means-tested program introduced a quarter of a century earlier. Annual benefits in 1952 were $480 paid to those age 70 and over. This was equivalent to about 17% of average wages and salaries. In 1978, average annual benefits were $1,900 paid to those 65 and over, the age of eligibility having been lowered in the late 1960s. This benefit level was equivalent to 14% of average wages and salaries. In the 1977 calendar year OAS benefits cost $3.6 billion.

The Canada and Quebec Pension Plans together constitute the second of Canada's nationwide pension programs. The first pensions under these plans were paid in 1967. The CPP and the QPP, which are almost identical, are contributory and earnings-related. Mandatory contributions are collected on earnings from employment up to a ceiling ($11,700 in 1979). Contributions are not paid (but benefits are) in respect of earnings below a base (the first $1,100 of earnings in 1979). Since 1966, the C/QPP contribution rate has been 3.6%. When there is an employer-employee relationship, each pays half. Since virtually everyone in the labour force pays these contributions, and since in the early years of the plans many of the elderly were not eligible for pensions from the C/QPP, funds of around $14.5 billion and $5.2 billion had accumulated in the CPP and QPP, respectively, by the end of 1978. If the C/QPP contribution rate is left unchanged, it is currently estimated that both funds will ultimately be depleted just after the turn of the century. If the present contribution rates were maintained until then, and the plans were subsequently put on a pay-as-you-go basis, under which annual contributions would be approximately equal in amount to annual benefit payments, it is estimated that the contribution rates would then have to be in the order of 6%, compared to the present 3.6%; in later years, the pay-as-you-go contribution rate would be in the 9-11% range depending on demographic developments.

The most important benefit of the C/QPP is the retirement pension. A person retiring in 1979 who had employment earnings since 1966 at or above the earnings ceiling ($5,000 in 1966 and $11,700 in 1979) would be eligible for a pension of $2,600 in that year (equal to 25% of the average of the earnings ceilings in 1977, 1978 and 1979). In fact, the average C/QPP retirement pension in 1979 is only about one-half of this amount. This is partly because many pensioners had earnings below the plans earnings ceiling, but also because of the way the plans were phased in; 1976 was the first year unreduced C/QPP retirement pensions were paid. Retirement pensions coming into pay before 1976 were prorated (90% of the full amount in 1975, 80% in 1974, etc.). In the 1977 calendar year, C/QPP disbursed some $1.3 billion in benefit

payments. Retirement pensions amounted to some $730 million, with survivor's, orphans' and disability pensions and death benefits accounting for the remainder. Over time, retirement pensions will account for a larger proportion of the total. If all the elderly with earnings in their work years had qualified for unreduced pensions in 1977, C/QPP pensions-in-pay would have been in the order of three times the $1.3 billion paid out in that year.

The third nationwide pension program is the Guaranteed Income Supplement. The program concentrates its benefits among those of the elderly with little or no income from pensions or investments. In 1978, the maximum single rate GIS was some $1,340. This, together with the OAS, provided total income of some $3,250 for those with no other income. For a married couple, with both spouses 65 or over and with no other income, GIS benefits in 1978 were $2,380; with the OAS, the couple's total income was some $6,200. GIS benefits are reduced by 50 cents for each $1.00 of other income (C/QPP pensions, employer-sponsored pensions, investment income, employment earnings, and so on) reported by applicants.

As time passes and more and more of the elderly receive pensions from the C/QPP, there will be a corresponding drop in the proportion of those who receive maximum GIS benefits. It might be noted though that the maturation of the C/QPP will not eliminate the GIS program. A couple both 65 or over, in receipt of one maximum C/QPP pension in 1978 and with no income from private sources, would have received public pensions of some $7,350, of which $1,200 would have come from the GIS. (Had the C/QPP earnings ceiling equalled the level of average wages and salaries, as will be the case in several years, the couple would have received some $7,800 in public pensions in 1978 with just under $800 coming from the GIS.)

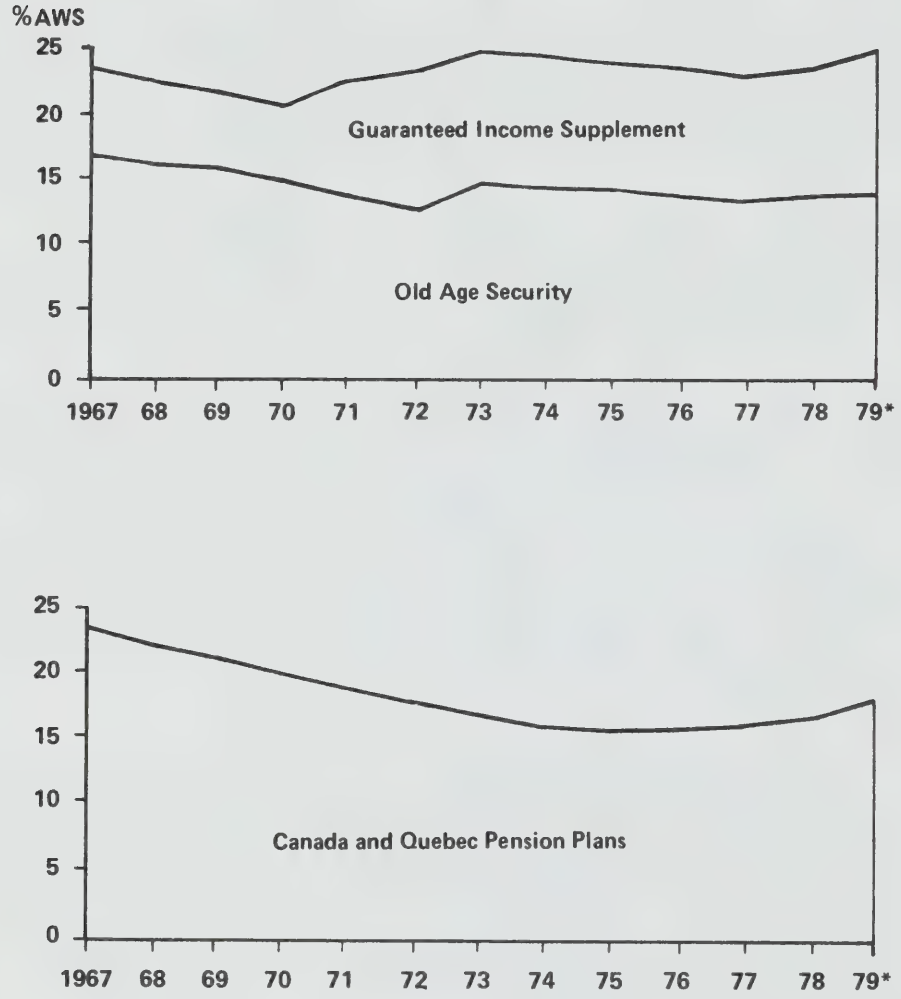
A companion program to the GIS, the Spouse's Allowance (SPA), is aimed at assisting low-income couples where one of the partners is 65 or over, but the other is between 60 and 64 and, therefore, not eligible for OAS or GIS benefits. The SPA guarantees such couples an income equal to the income they would have received from the OAS/GIS had each partner been 65 or over. Like the GIS, the SPA benefits are income-tested. Some 1.1 million people 65 and over receive GIS benefits. Some 75,000 others benefit from the SPA. In 1977, these two programs paid out some $1.2 billion in benefits.

Following a number of amendments in the 1970s, benefits from each of the three main pension programs just described were fully indexed to the Consumer Price Index (CPI). Benefits from the SPA have been price indexed since the program began in 1975.

Since 1967, the first year in which benefits were available from the OAS, the C/QPP and the GIS, the relationship between the benefit levels of the programs has changed, as shown by Figure 3. The top panel of the figure shows that, despite an increase in 1973, the OAS is now equivalent to a slightly smaller percentage of average wages and salaries than it was in 1967. (In the early 1960s, it had been as high as 20% of average wages and salaries.)

FIGURE 3

Public Pension Benefits as Percentage of Average Wages and Salaries (Maximums)



*Estimated

The opposite is the case for the GIS. In 1967, the single rate maximum GIS was equal to some 7% of average wages and salaries. After the increases in the early 1970s, and the increase which took effect in 1979, that figure rose to around 11%. The curve depicting the role of the C/QPP reflects the fact that, until 1973, the maximum annual rate of increase of the C/QPP earnings ceiling was 2%, which was well below the rate of increase in average wages and salaries in each year since 1967. Until a 1974 amendment changed the situation, this had the effect of reducing the size of the two earnings-related pension plans in relation to wages and salaries. (It is important to note that the C/QPP benefit

levels shown in Figure 3 do not, for these illustrative purposes, take account of the phase-in procedures noted earlier. For this reason the C/QPP data for the 1967-1975 period are hypothetical.) The legislation now calls for the earnings ceiling to equal average wages and salaries, but under the transitional arrangements established, this is not likely to occur for several years.

Figures 4 and 5 compare the size of Canada's public pension system in 1977 with those in other western industrialized countries. Figure 4 shows the relationship between public pensions and gross earnings just before retirement in eight countries for couples with one working member whose lifetime earnings equalled the national average. For those at this average earnings level, it can be seen that Canada's public pension system is smaller than those in a number of other countries. Since the C/QPP earnings ceiling as a percentage of average wages and salaries is low in relation to earnings ceilings in other countries, it should be emphasized that the higher the earnings level adopted for comparative purposes, the smaller Canada's public pension system would appear. Figure 5 indicates that for those with low pre-retirement earnings, the conclusion is quite different. The elderly in Canada

FIGURE 4

Public Pensions as a Percentage of Gross Earnings Just Before Retirement

One-Earner Couples with Earnings Present Throughout Work Years

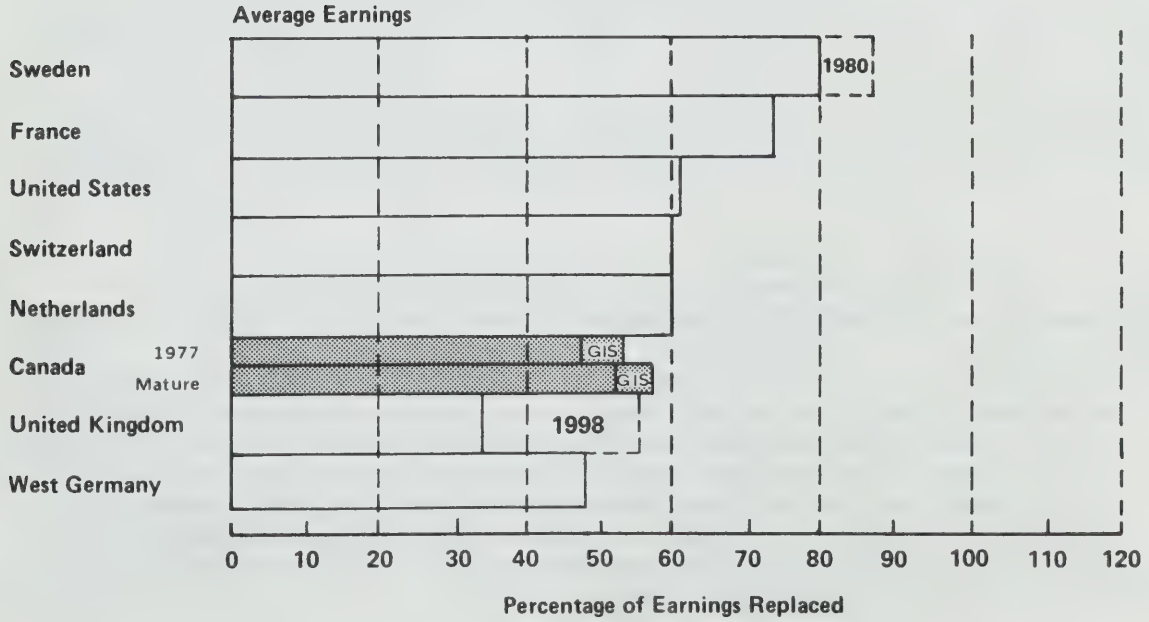
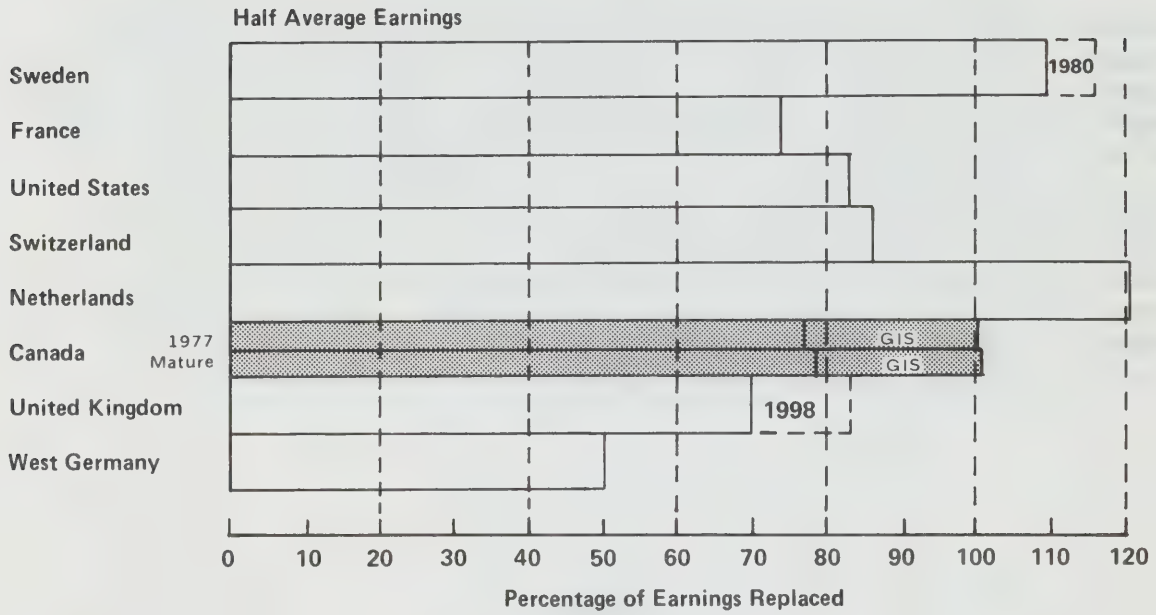


FIGURE 5

Public Pensions as a Percentage of Gross Earnings Just Before Retirement

One-Earner Couples with Earnings Present Throughout Work Years



whose incomes were low prior to retirement age are generally as well or better off, in relative terms, as those in similar circumstances in other countries.(3)

The situation of the one-earner couples shows Canada at its best, in relation to other western industrialized countries. If two-earner couples or single individuals are compared, Canada's position is relatively worse. For instance, for single individuals earning at the average wage, Canada drops from sixth to last in the list of the eight countries shown. For single individuals earning at half average wages, Canada drops from third to fourth. While all these comparisons are based on the most accurate information available, the results should be taken as indicative of rough orders of magnitude since age of entitlement, subsidized services, tax systems etc. differ among the countries shown.

Not taken into account in the above outline are programs operated by some provincial governments that provide income-tested benefits as a supplement to the federal GIS program. These provincial 'top-up' programs,

(3)In both Figures 4 and 5 it is assumed that the couple in Canada made no private provision for retirement and, therefore, was eligible for GIS. No comparable programs apply in the other countries at the earnings levels shown. The extension to the bars for Sweden and for the United Kingdom and the 'mature' bar for Canada project changes in the relationship between pre-retirement earnings and post-retirement benefits that will result in future from revisions that have already been made in the respective public plans.

all introduced in the 1970s, are largest in Alberta, Ontario and British Columbia, providing maximum annual benefits of around $1,200 for a couple. The programs in Saskatchewan, Manitoba and Nova Scotia are all less than half the size of the first three. The remaining provinces do not operate such programs. In Ontario and British Columbia, a couple with no private income and no pension from the C/QPP receives in 1979 almost the same total income (from OAS, GIS and the provincial top-up) as a couple in receipt of a maximum 1979 C/QPP retirement pension (whose income comes from OAS, GIS and the C/QPP).

Three features of Canada's public pension system stand out from this brief description. Firstly, much of the system is of a quite recent vintage; 15 years ago, the C/QPP, the GIS, and the supplementary programs did not exist (although other means-tested programs did). Secondly, most of the recent changes in the system - the GIS benefit increases and the inception of the provincial top-ups - have been directed towards those of the elderly having little or no private income. Thirdly, for those whose earnings are average and above, Canada's public retirement income system is relatively small compared to those in other western industrialized countries.

B. The Employer-Sponsored Pension System

The Canadian employer-sponsored pension system consists of some 15,000 Registered Pension Plans (RPPs), to which some 3.9 million workers belong. In 1975, employers and employees contributed $3.0 billion and $1.5 billion respectively to these plans. These contributions to employer-sponsored pension plans are, within limits, deductible for tax purposes. For plans to be registered for tax purposes, employer contributions must be made. Some plans call for employee contributions, while others do not. In 1977, benefit payments from these plans totalled some $2.1 billion (with perhaps a quarter of this total flowing to those under the age of 65). Benefits are taxable in the hands of the recipient.

Some 95% of the 3.9 million active plan members belong to defined benefit pension plans where the pension is determined according to one of a number of types of formulae. The formulae are usually based on length of plan membership and, often, on earnings. An example is a '1% final five-year average plan'; if the employee's average wage/salary in his last five years in the plan equalled $20,000 and if he had been a plan member for 25 years, he would be entitled to a pension at the normal pensionable age established by the plan of (1%)($20,000)(25 years) = $5,000.

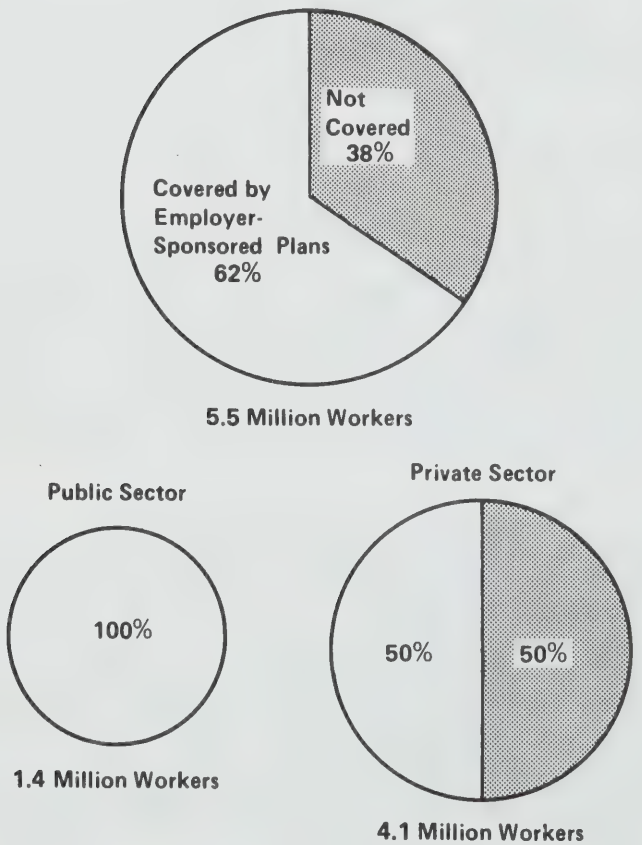
Defined benefit plans are to be sharply distinguished from defined contribution plans, to which the remaining 5% of plan members belong. Under these plans the employer, and usually also the employee, regularly contribute a sum of money, often a percentage of the employee's earnings. The funds are invested on behalf of the employee and the resulting accumulation is converted into an annuity, often when the employee retires. As with personal saving, the size of the pension from a defined contribution plan is influenced by the rate of return the invested funds attract. This is not the case with the more popular defined benefit plans where pensions are paid according to an established formula.

1. Coverage and Vesting. Employer-sponsored pensions are paid in respect of only a small proportion of the years worked by retired people. There are two principal reasons for this. Firstly, many employers - mainly those of small and medium size - do not offer pension plans to their employees; and secondly, the terms of employer-sponsored pension plans generally require many years of service before terminating employees acquire a vested right to a deferred pension.

Most small employers wish to avoid the administrative costs of operating a pension plan and the risks of higher than expected costs that can easily be associated with defined benefit plans. As a result, only some 48% of paid workers in Canada were members of employer-sponsored pension plans in 1976. When part-time workers and those under age 25 and over age 64 are excluded, the coverage ratio rises to an estimated 62%. As indicated in Figure 6, there is a significant difference in the coverage ratios in the public and private sectors. In 1976,

FIGURE 6

Estimated Proportion of Full-Time Paid Workers in Canada Aged 25-64 Covered by Employer-Sponsored Pension Plans, 1976

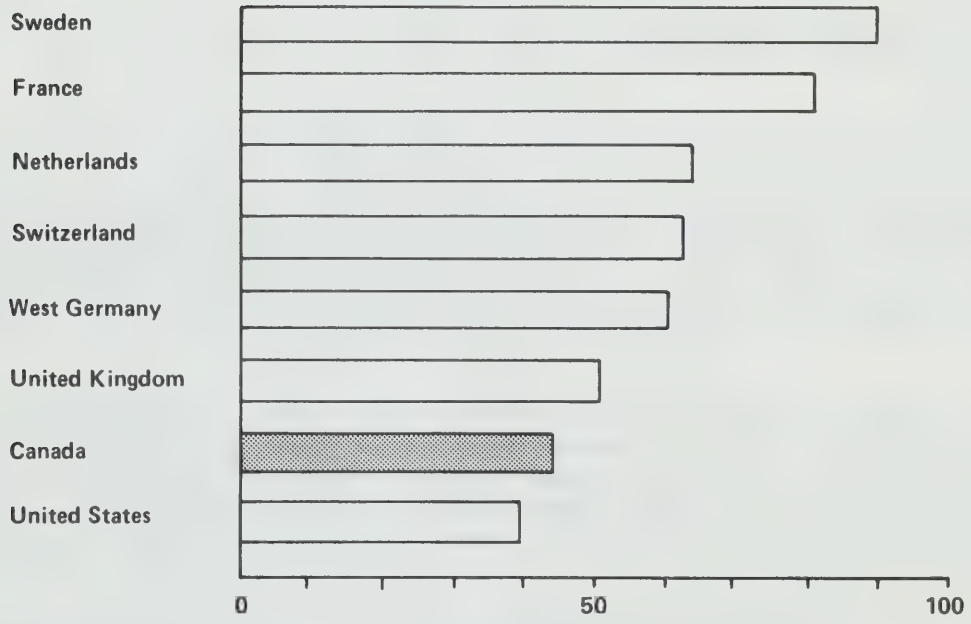


virtually all full-time paid employees between the ages of 25 and 64 who worked for a public sector employer were members of a pension plan. In the private sector, the corresponding ratio is around 50%.

Figure 7 compares the coverage ratios of employer-sponsored pension systems in eight countries. When coverage data from all of the countries are put on a comparable basis, the European countries are seen to have higher coverage ratios than either Canada or the United States. (The three countries with the highest coverage ratios have elements of compulsory membership in their employer-sponsored pension systems.)

FIGURE 7

Proportion of Paid Workers in Canada and Seven Other Countries Covered by Employer-Sponsored Pension Plans, 1976



The second reason why years of pensionable service are only a small proportion of total years worked relates to the vesting provisions generally found in the employer-sponsored pension system. A member of a defined benefit plan is said to be vested when he has established a right to a pension calculated according to the plan's benefit formula. To become eligible, he may - for example - be required to have reached 45 years of age and to have been a member of the plan for at least 10 years. If an employee leaves the plan before meeting these requirements, he would be entitled to receive only a return of his own contributions,

assuming it was a contributory plan, usually with some interest. In a non-contributory plan, he would receive nothing. Given such requirements, it is quite possible for a mobile employee to have been a member of a pension plan for all of his working years and yet enter retirement with no employer-sponsored pension whatsoever.

Table 3 shows the percentage of employees in plans having various vesting standards in 1976.

Table 3

Vesting Provisions in Employer-Sponsored Pension Plans, Percentage of Members Covered by Various Provisions, 1976(1)

	%
Less than 10 years	24
10 Years	35
More than 10 years	12
45 Years of age and 10 years of service	15
Other(2)	13
No vesting	1

(1)Plans with 'years of service' vesting requirements and plans with 'years of plan membership' vesting requirements are tabulated together.
(2)'Other' refers mainly to an age only or to an age and service requirement (other than '45 and 10').

Table 3 indicates that about three-quarters of all pension plan members belong to employer-sponsored pension plans that require at least ten years of service before vested status is achieved. As a result of the mobility of the Canadian labour force, a high proportion of workers enter retirement with few, if any, years of pensionable service to their credit.

The fourth entry in Table 3, 45 years of age and 10 years of service, is the minimum vesting standard required by plans in the federal jurisdiction and in the jurisdiction of five of the six provinces which have legislation regulating employer-sponsored plans. (The minimum vesting standard in the sixth province, Manitoba, is ten years of service.) In all seven jurisdictions, a member of a contributory plan who leaves an employer after having met the '45 and 10' requirement cannot withdraw his contributions; they are locked into the plan. Under these circumstances, the member will receive a deferred pension, that is, one that comes into pay at retirement age.

Table 4

Minimum Vesting Requirement
for Employer-Sponsored Pension Plans

Country	Age	Plan Membership (years)	Notes
France		immediate	
Sweden	28	immediate	for white collar workers
Netherlands	any age	1	
Switzerland	any age	5	9 months proposed
United States	any age	10	alternative provisions for partial vesting
United Kingdom	26	5	
West Germany	35	10	earlier vesting possible if employee has worked for employer prior to joining plan
Canada	45	10	

Table 4 makes it clear that minimum vesting standards in Canada generally entail a good deal more delay than those of other countries. While the previous table showed that a substantial proportion of Canadian members belong to plans with vesting provisions which are better than the minimum required, it remains the case that, on average, Canadians (and particularly those working in the private sector) have to work longer under employer-sponsored pension plans than their counterparts in most other countries before vested status is achieved.

The pensions of employees who move from employer to employer can be protected not only by early vesting provisions but also by transfer agreements between employers and by multi-employer plans. In the case of transfer agreements, an employee's service and salary with a prior employer can be included in the pension calculation made by a subsequent employer. In the case of multi-employer plans, an employee moving among employers that are party to such an arrangement remains in the same plan. In each case, an employee's job mobility does not damage his pension status. Many employees in the public sector benefit from these arrangements. In the private sector, only a handful of employers are party to transfer agreements; multi-employer plans are more popular, particularly in the forestry and construction industries. In general, though, these arrangements are not widespread. This, together with the vesting situation described above, means that portability in the employer-sponsored pension system is inadequate.

2. Survivorship Provisions. Most pension plan members are married when they retire. Since a significant proportion of their spouses will have little or no pension income of their own from employer-sponsored pension plans, the survivorship provisions of these plans are important.

In the private sector, over three-quarters of plan members belong to plans that do not provide automatic survivor's pensions when the retired plan member dies. Most of the rest of private sector plan members belong to plans where, as well as being paid for the life of the member, the pension is paid for a specified time period, usually five years. In this case, if the pensioner dies after three years of retirement, his spouse would continue to receive the pension for two years.

The survivorship provisions of public sector plans are, on average, a good deal more generous than those in private sector plans. More than 70% of members of public sector pension plans belong to plans which provide for automatic survivor's pensions on the death of the member after retirement.

3. Adjustment for Inflation. The coverage and vesting features of the employer-sponsored pension system serve to keep the years of pensionable service earned by workers far below potential levels. These factors constitute two of the principal reasons why employer-sponsored pensions play a relatively small role in Canada's retirement income system. A third reason stems from the generally inadequate way these pension plans adjust for inflation. When there is inflation and little or no adjustment in pension payments, both former plan members who have earned deferred benefits and pensioners will suffer.

In a typical defined benefit plan, three kinds of inflation adjustments need to be made: adjustments to the earnings base, to deferred pensions, and to pensions-in-pay. Without such adjustments, the real value of benefits will be eroded.

Some plans base pensions on a fraction of average earnings during plan membership (career average plans). Unless the earnings figures used in the calculation are adjusted to reflect any inflation that may have occurred over the period since the earnings were received, the real value of the pension that is ultimately received will be adversely affected. There is some evidence that in many, if not most, career average pension plans earnings bases are adjusted for inflation. In other defined benefit plans the earnings base is the average of the participant's highest earnings over a few years (final or best average plans). Since the highest earnings typically occur at or near the end of the career, and since wage and salary levels usually increase at least in line with the rate of inflation, those employees who end their careers as members of these and similar plans receive an almost automatic inflation adjustment of their earnings base.

The situation is different for the second kind of inflation adjustment required by defined benefit plans - adjustments to deferred pensions. While little attention is usually focused on these adjustments, they are nevertheless crucial. When an employee with vested status terminates employment before retirement he is entitled to receive a deferred pension from his former employer. The pension is calculated at the time of his departure, say, at age 35, but is usually not received until the employee reaches the normal pensionable age set by the plan, often age 65. This means that employees entitled to deferred pensions

may have to wait many years to receive them. With even moderate rates of inflation, many of these deferred pensions will be worth very little when they come into pay - less in many cases than the annuity the member could have purchased by investing his contributions that would have been returned to him on termination of employment.

Whether for this or for other reasons, the great majority of vested members of contributory pension plans who leave their employers before the statutory '45 and 10' lock-in point noted above do, in fact, take a return of their contributions, thus extinguishing any right to deferred pensions. These employees, like those who do not fulfill vesting requirements, gain nothing from having belonged to an employer-sponsored pension plan.

Only a few employer-sponsored pension plans adjust deferred pensions for inflation, which likely reflects the negligible bargaining power possessed by departed employees. This failure to adjust deferred pensions for inflation between the time an employee terminates and the time the deferred pension comes into pay is a fundamental shortcoming of the employer-sponsored system. Without such adjustment, earlier vesting provisions would, in many cases, further penalize mobile employees.

The third kind of inflation adjustment is for pensions-in-pay. No fully representative survey of these adjustments has been carried out in Canada. However, those that have been done suggest that some adjustments to pensions-in-pay in the private sector are general among large employers, but much less common among smaller employers. It is also the case that adjustments by public sector employers have been, on average, larger and more regular than those by private sector employers. A rough estimate is that, over the last five or six years, the pensions of those who formerly worked in the public sector have been adjusted to correct, on average, for something over half the inflation that has occurred. In the private sector, such adjustments are estimated to have accounted for well under half the inflation that has occurred.

Of the three kinds of inflation adjustment discussed above, the degree of adjustment in the 1970s has been greatest in respect of earnings bases, less in respect of pensions-in-pay and close to zero with respect to deferred pensions. It is notable that this ordering corresponds to the influence that the affected groups can bring to bear on those responsible for making the adjustment decisions.

4. Financing of Pension Plans. Sponsors of defined benefit employer-sponsored pension plans endeavour generally to set aside funds each year to cover the future pension benefits earned in that year. This method of financing is referred to as funding. Its main purpose is to afford plan members and pensioners a degree of security independent of the future financial position of the employer.

Funding rules are established in the pension benefits legislation of those jurisdictions having such laws. Many plans sponsored by public

sector employers are, however, exempt from those rules principally because the special position of the employer is regarded as providing the needed security of benefits. Some public sector plans are financed on a pay-as-you-go basis; other plans are funded. Among the latter group, some invest pension assets through capital markets paralleling procedures in the private sector. Others, rather than investing pension contributions in this way, estimate their pension costs and show the employer's share of these costs as a budgetary expense and record the accrued liabilities as a separate debt item in the employer's accounts.

Defined contribution plans are, by definition, fully funded at all times. In defined benefit plans, however, estimated pension liabilities can easily exceed pension assets. New plans and recently improved plans, for example, are frequently less than 100% funded. As well, the funded status of plans generally may deteriorate when economic and demographic assumptions turn out to have been too optimistic. Most employees belong to plans which are less than 100% funded; flat benefit plans (where monthly pensions equal $x per year of service) are, as a group, the furthest from a fully funded position.

It will be clear that employers who offer defined benefit plans face the risk that their pension costs will be much higher than expected. The regulatory framework within which plans operate requires that estimates be made of the accruing cost of pensions and that sufficient funds be set aside to cover these costs. To an employer, however, this year's pension costs have a very different character from this year's wage costs. Once paid, wage costs are finished with (as are this year's costs of defined contribution plans). The cost of defined benefit plans, on the other hand, can only be estimated on the basis of assumptions concerning future wage/salary growth, employee turnover, rates of return and so on. The future, however, may well unfold in unexpected ways, rendering former cost estimates meaningless. This can lead to the necessity for extra employer contributions in respect of employees' service performed years before.

The most important element of this cost uncertainty is the inflation-adjusted rate of return earned on invested assets. If employers knew that, after adjustment for inflation, pension assets would always earn, say, 3% per year, or if they knew at least that a fluctuating return would, over several years, average out to that value, then much of the cost uncertainty associated with employer-sponsored pension plans would disappear. Employers would be able to count on the relative stability of a variable that plays a large role in determining their pension costs. In practice, the inflation-adjusted rate of return on pension fund assets has fluctuated, with the result that employers' pension costs have also fluctuated.

Owing to the cost uncertainty associated with defined benefit plans, many employers - particularly those selling into competitive markets at prices over which they have no control - do not offer such plans to their employees. As well, the vast majority of those employers that do offer defined benefit plans avoid some of the risk inherent in them by not automatically adjusting some or all of the terms of the plan for inflation, preferring instead to increase the earnings bases on which pensions will be based and pensions-in-pay in an ad hoc way.

In brief, Canada's employer-sponsored pension system, and particularly that part of it associated with the private sector, is quite small in relation to the rest of the retirement income system. One reason is that half of the full-time paid employees between the ages of 25 and 64 working in the private sector do not belong to an employer-sponsored plan. A second reason is that many of those who were members of employer-sponsored pension plans, even for many years, can end up with little or no pension income due to their job mobility and to the delayed vesting provisions of plans. A further reason stems from the fact that virtually none of the deferred pensions which are earned are adjusted for inflation, and that adjustments to pensions-in-pay over the last five or six years in the private sector are estimated to have restored well under half of the purchasing power that has been lost owing to inflation.

5. Costs of Public and Employer-Sponsored Pension Plans in Canada and the United States. A later section deals in greater detail with pension costs; this section focuses on a comparison of pension costs in the United States and Canada. To facilitate the comparison the following comments apply only to the commercial sector in each country.

Table 5 shows that public pensions entail higher costs in the United States than they do in Canada. The 'unallocated costs' shown in the table refer to the OAS, GIS and provincial supplements. The estimated cost of these programs is expressed as a percentage of total payroll.

Table 5

Aggregate Direct Costs to Employers and Employees in the Commercial Sector of Public Pension Programs in Canada and the United States, and Unallocated Costs, 1976

	Canada	United States
	(% of gross payroll)	
Direct employer contributions	1.0	4.3(1)
Direct employee contributions	1.0	4.3
Total direct employer-employee contributions	2.0	8.6
Unallocated costs as a percentage of payroll	4.1	0

(1)Includes old age & disability insurance, but excludes hospital insurance.

There are three main reasons for the higher pension costs in the United States. Firstly, the United States Social Security system is somewhat larger than its Canadian counterpart (OAS/GIS/C/QPP). Secondly, it has been in operation much longer than the C/QPP, with the result that there is a higher ratio of beneficiaries to contributors in the United States program than there is in the Canadian plans. (If full cost contribution rates were being charged - rates that would cover the cost of benefits of those now entering the labour force - C/QPP contribution rates would be about double what they now are.) Thirdly, there is a slightly higher proportion of elderly citizens in the United States than in Canada.

Table 6 shows that aggregate employer-sponsored pension costs as a percentage of the gross payroll of the sector are also higher in the United States than in Canada.

Table 6

Aggregate Cost as a Percentage of Payroll of Employers and Employees in the Commercial Sector of Employer-Sponsored Pension Programs, Canada and the United States, 1976

	Canada	United States
	(% of gross payroll)	
Employer contributions	3.3	5.1
Employee contributions	1.5	0.4
Total employers and employees	4.8	5.5

C. Private Saving

The third main component of the retirement income system is the investment income generated from private saving. Table 2 on page 5 showed that investment income is an important source of retirement income, accounting for some 21% of all income reported by the elderly. Figure 2 on page 3 indicated that income from that source is concentrated in relatively few hands.

One of the principal ways in which people save privately for their retirement is through Registered Retirement Savings Plans (RRSPs). The opportunity to deduct contributions to RRSPs from income for tax purposes has existed in Canada since 1957, but RRSPs have become very popular only in recent years. In 1978, contributions to these vehicles were $2.4 billion, slightly exceeding total employee contributions to employer-sponsored pension plans. Assets of RRSPs at the end of 1976 were estimated to be in the order of $7.5 billion. Annuities arising from RRSPs, however, do not yet play a significant role in the income of the elderly.

An important characteristic of saving - registered and non-registered - is that it tends to be concentrated in relatively few hands. On the basis of income tax data, it is estimated that one-half of middle-income families now of working age will have no investment income in retirement and a further 15% of such families will have only small amounts in relation to their pre-retirement income. These are rough estimates, but they suggest that one-third of the middle-income group possesses almost all of the savings owned by that group.

The saving associated with homeownership may also be said to constitute part of the retirement income system. A high proportion of the elderly own their own homes and relatively few of these have mortgages outstanding on which to make payments. It is likely that the savings held in this form are more evenly distributed among income groups than is the case for savings generally.

D. Sources of Retirement Saving and Their Uses in the Economy

Even given the fact that many employees are not members of employer-sponsored pension plans and that many people have little or no retirement saving, savings made for retirement purposes play an important economic role. Table 7 shows that during the 1972-1976 period, more than $40 billion - or 23% of all saving in the economy - was undertaken for retirement purposes. This means that 23% of the capital stock - factories, homes, schools, roads, etc. - put in place over that time period was financed by such savings.

Table 7

Sources of Saving, Canada 1972-1976

	$ Billion	% of Gross Saving
Retirement Saving Identifiable as Such		
C/QPP	8.8	5.0
Employer-sponsored pension plans	26.0	14.7
RRSPs	5.9	3.3
Sub-total	40.7	23.0
Other Saving		
Persons & unincorporated business	26.4	15.0
Government	-6.4	-3.6
Corporate and government business enterprises	24.0	13.6
Net saving	84.7	48.0
Capital Consumption Allowances and miscellaneous valuation adjustments (all sectors)	78.7	44.6
Deficit on current transactions with non-residents	13.0	7.3
Residual error	0.1	0.1
Gross saving	176.5	100.0

Table 8 shows the claims of the various components of the retirement income system and indicates their relative importance. At the end of 1976, the total claims of the retirement income system amounted to an estimated $77 billion. Two-thirds of these were generated by the public earnings-related plans (the C/QPP) and by plans operated by public sector employers. The table makes clear that the assets of these plans are heavily concentrated in government bonds and other claims on governments. Some 59% of assets of the total retirement income system went to finance the public sector.

Table 8

Estimated Amount and Distribution of Claims of Retirement Income Vehicles, End of 1976

Type of Plan and Total Assets	Claims on Gov'ts	Corporate Bonds	Corporate Equities	Mortgages	Other
		(% distribution)			
Canada Pension Plan $10.9 billion	100	0	0	0	0
Quebec Pension Plan $4.0 billion	62	10	15	5	8
Public employer plans $35.7 billion	81	5	5	6	4
Private employer plans $18.9 billion	15	21	27	25	13
RRSPs $7.5 billion	10	10	15	59	6
All plans $77.1 billion	59	9	11	15	6

Note: Numbers may not add due to rounding.

Table 9 provides detail on the growth of the claims of the retirement income system. The more rapid growth in the provincial category over the 1967-1976 period shown in the top half of the table reflects the rapid increase in funds from the CPP which have been loaned to provincial governments. The very rapid growth in guaranteed funds shown in the bottom half of the table is largely associated with the recent popularity of RRSPs.

Table 9

Distribution and Growth of Claims of Retirement Income System by Type of Claim, 1967-1976

Type of Claim Held by all Plans	Distribution 1976 (%)		Compound Growth Rate 1967-1976
Public Sector			
Federal bonds	1.6		7.4
Provincial bonds	25.8		20.4
Other claims on federal and provincial governments	29.9		11.5
Municipal bonds	1.8		5.0
Public sector share	59.1	Average	14.0
Private Sector			
Corporate bonds	8.7		13.8
Mortgages	10.9		14.1
Guaranteed funds	4.0		47.3
Equities	11.3		20.7
Miscellaneous	6.0		17.0
Private sector share	40.9	Average	17.2
Combined Share	100.0	Average	15.2

The main points these tables show is that in the 1967-1976 period, two-thirds of the claims of the retirement income system were generated in the public sector and that almost 60% of the assets of the retirement income system went to finance this sector. Since the financing needs of the public sector were smaller than those of the private sector over the period shown, pension funds met a larger proportion of these public sector needs than of those in the private sector.

E. The Constitutional Setting

Under Canada's constitution, the federal and provincial levels of government each have important powers in the pension area. Both the federal and provincial governments can operate pension programs that disburse flat rate, income-tested and earnings-related pensions. Much of the federal government's power in this area stems from two constitutional amendments. Prior to the introduction of the Old Age Security Act in 1952, a constitutional amendment was required to confer authority on the Parliament of Canada to make laws in relation to old age pensions. A further amendment was required prior to the introduction of the Canada Pension Plan in 1966; the authority with respect to old age pensions was extended to include the payment of "supplementary benefits including survivor's and disability benefits irrespective of age". In actual practice, only the federal government pays flat rate pensions, the federal government and a number of provinces operate income-tested pension programs, and the federal government and one province - Quebec - operate public earnings-related pension plans.

Employer-sponsored pension plans are, broadly speaking, subject to two kinds of regulation. Firstly, a degree of control is exerted over such plans by Revenue Canada through the administrative rules governing the registration of pension plans for tax purposes. Secondly, vesting, solvency, investment and disclosure matters have been regulated since the mid-1960s by pension benefits standards legislation. Six provinces and the federal government have such legislation governing employment subject to their jurisdiction.

III. EVALUATING THE RETIREMENT INCOME SYSTEM

The description of Canada's retirement income programs suggests that two broad objectives have motivated public policy in Canada with respect to the retirement income system. The first is the alleviation of poverty. The OAS/GIS system, together with the supplemental provincial programs, have been the principal programs directed towards the achievement of this objective. The second broad objective is to help and/or require people to divide their lifetime consumption in some appropriate way between their work years and their retirement years. This objective is reflected in the OAS and in the C/QPP, in the tax assistance granted to private savings and to employer-sponsored pension plans, and in the legislation which establishes standards for employer-sponsored pension plans.

This section evaluates the success the Canadian retirement income system has had in meeting these two objectives. In doing so, it distinguishes between questions relating to the amount of retirement income produced by the system and questions relating to the way in which retirement income is allocated among the elderly. The economic and institutional effect of the retirement income system is also examined.

A. The Amount of Retirement Income Produced by the System

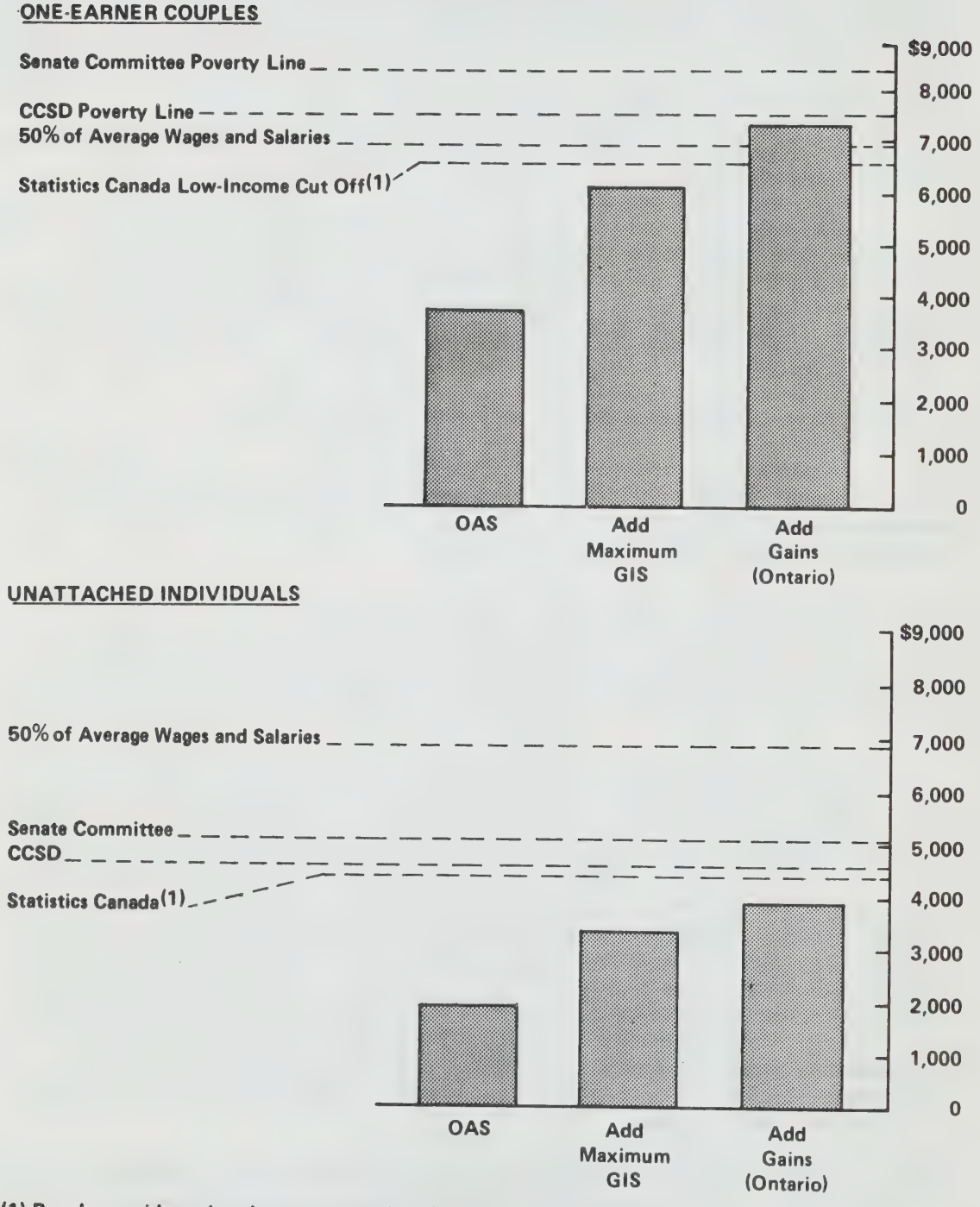
A number of questions need to be addressed to determine whether the retirement income system is 'big enough' - that is, whether it generates sufficient income in aggregate to provide reasonably for the well-being of the elderly in retirement.

1. The Elderly Poor. The first question is whether the poor among the current elderly are adequately treated. All societies recognize a responsibility to those of their members with little or no private income; this responsibility is generally considered to be heavier with respect to the elderly poor since they are normally unable to work.

As noted earlier, virtually all of the elderly age 65 and over receive OAS benefits; those with little or no private income may also receive GIS benefits and, in some provinces, these benefits are supplemented by other income-tested assistance. Figure 8 compares the 1978 benefit levels of those with no other income with three commonly used poverty standards (each of which is derived differently) and, for reference, with half of average wages and salaries.(4) The figure shows that the cash income guaranteed to elderly single individuals who receive OAS plus the maximum GIS benefit is substantially below each of the minimum income standards. While couples do better than singles, the OAS/GIS system still leaves them below the poverty levels shown; when a provincial supplemental program such as the Ontario Guaranteed Annual Income Supplement (GAINS) is included, couples are above some of the poverty measures and below others.

(4)In January 1979, GIS benefits were increased by $20 a month for each household in receipt of GIS. This increase is not reflected in the figure.

FIGURE 8
Benefit Levels Guaranteed in 1978



(1) Based on residence in urban centres with 100,000 – 500,000 population

Two qualifications must be noted in interpreting these data. Firstly, wealth as such is not taken into account in determining GIS benefits - only actual income. Many of the elderly poor possess wealth, particularly in the form of owner-occupied housing. Secondly, other programs - housing subsidies, for example, that help to improve the well-being of some of the elderly poor - are not shown in Figure 8. Subject to these qualifications, these data indicate the need for increased assistance for the elderly poor, especially those who are single and who do not benefit from the economies of scale that result from sharing accommodation with others.

2. Income Replacement. The income-tested programs, GIS and the provincial top-ups, are designed, together with the OAS, to alleviate poverty among the current elderly. Other retirement income vehicles - earnings-related pension plans operated by employers and by government, and private saving - have a different focus. The income an individual receives in retirement from these sources - pensions, annuities and investments - is usually thought of as having a replacement function. That is, it replaces the main source of pre-retirement income - earnings from work - that is no longer available in retirement.

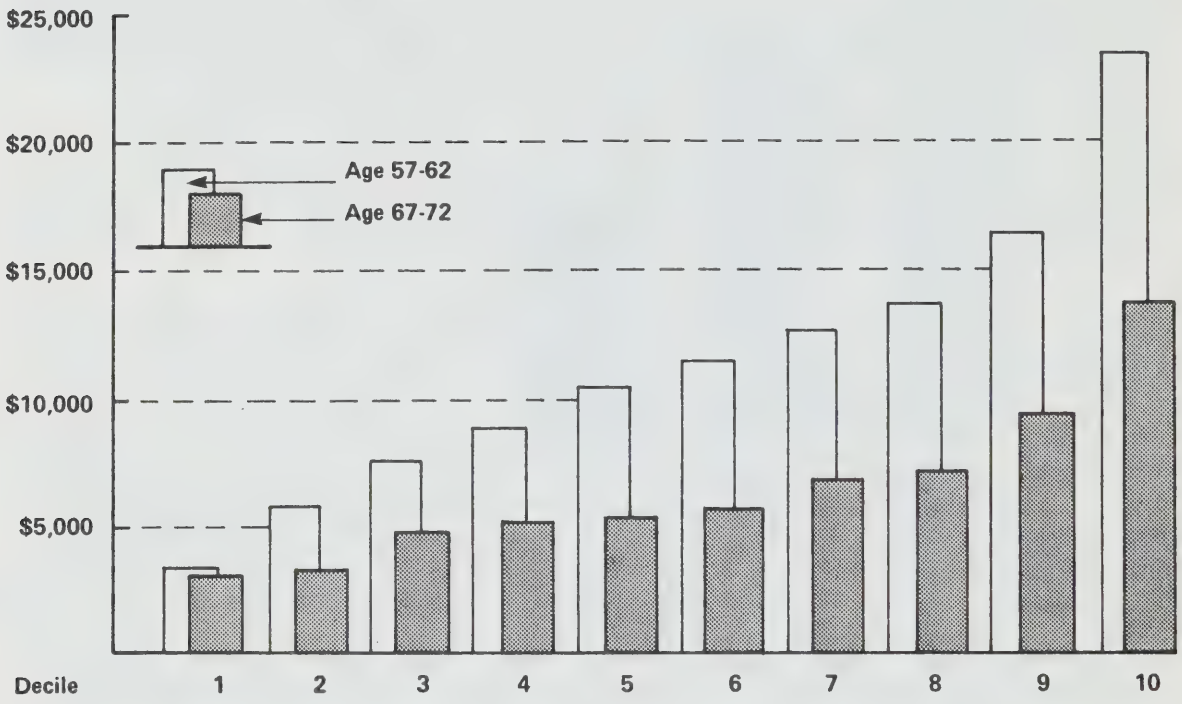
The second question to be addressed in determining whether the retirement income system is 'big enough' is whether these sources of replacement income play an 'appropriate' role in the retirement income system. What role might be appropriate is, of course, a matter of judgment. To provide a basis for answering this question, the assumption is made here that a large proportion of Canadians would, if given the choice, choose to arrange their lifetime consumption so that they would be roughly as well off after retirement as they were before. If the living standards of the current elderly are below what they were before retirement, and/or if the future living standards of those now of working age are expected to fall after retirement, the implication is that, if the role of the OAS is taken as given, the replacement income sources are insufficient.

If the adequacy of the retirement income system is judged by this criterion, the system, at least insofar as the current elderly are concerned, is too small. This conclusion cannot be precisely documented since there are no data that trace the consumption patterns of families over their lifetime. But some of the material already presented in the introduction suggests this to be the case, as does Figure 9. This figure compares the estimated disposable income levels of couples whose highest-income recipient in 1975 was between the ages of 57 and 62 (and who, in most cases, faced imminent retirement) with the comparable data for those aged between 67 and 72 (whose retirement was likely fairly recent). In each case the data are divided into groups according to income levels, each containing 10% of the population of the total group. In assessing the role of the replacement income vehicles, pension plans and private saving, it is the middle-income group that is of interest, say, those in the third to the eighth deciles. For those in these deciles, Figure 9 indicates a substantial difference between the disposable incomes of the two groups. (Some of this difference is attributable to the fact that the incomes of the younger group reflect recent productivity growth, whereas those of the older group would be less likely to do so.) If it

can be assumed that the disposable incomes of the younger group are broadly reflective of what the disposable incomes of the older group were ten years before, the basic image that emerges is one of a marked drop in retirement of the disposable income available to those whose earnings were in the middle range during their working years.

FIGURE 9

Disposable Incomes of Couples Age 57-62 and Age 67-72, by Decile, 1975



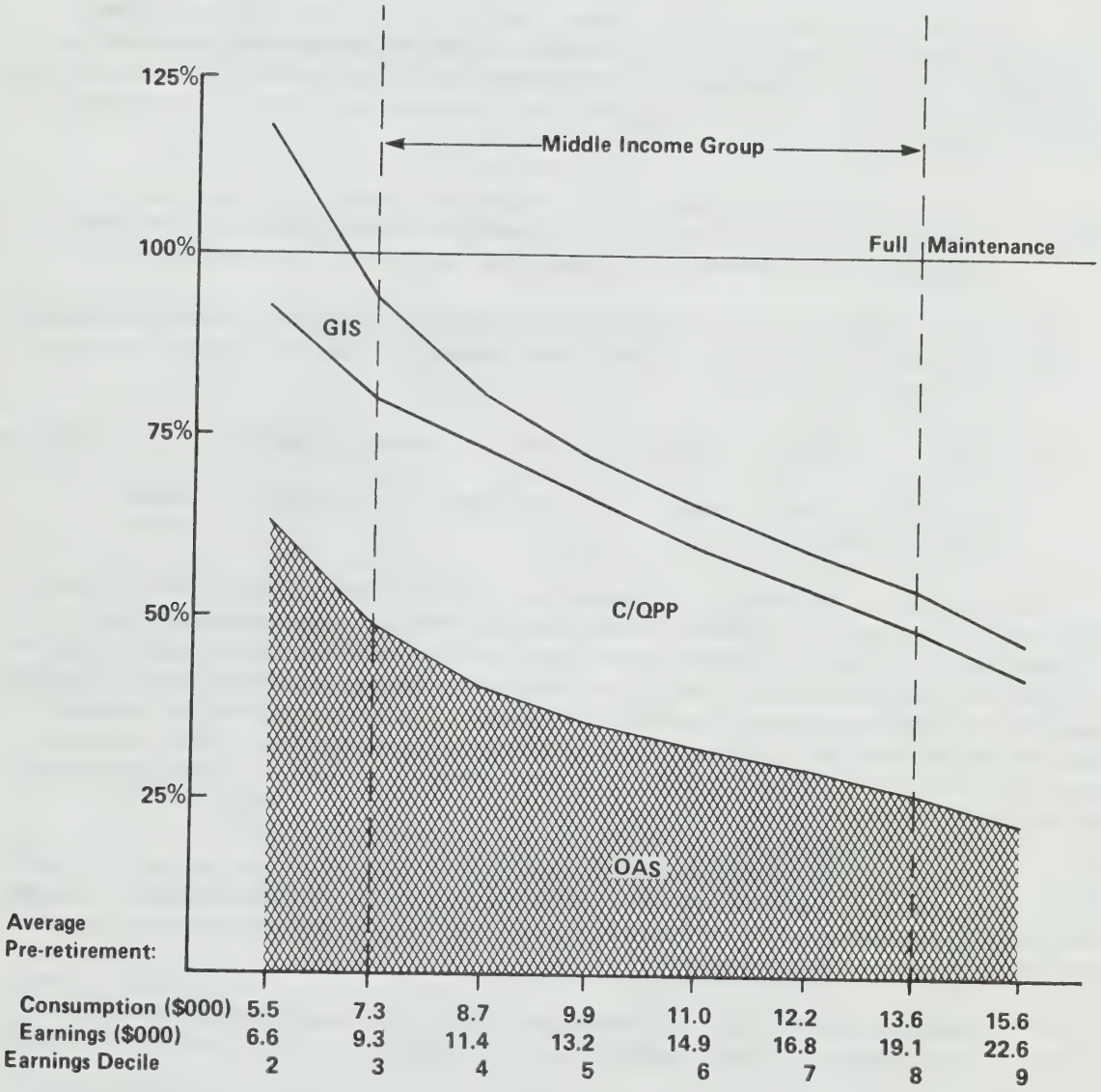
This situation might be expected to change somewhat with the passage of time as the C/QPP begin to play their full role in providing retirement income to the elderly. Even when this comes about, however, it will remain the case that those who had incomes in the middle ranges while working, and who depend solely on public pensions in retirement, will experience sharp drops in living standards when they retire.

This essential point is depicted graphically in Figure 10, which shows the extent to which the current public pension system will maintain the pre-retirement living standards of one-earner couples where the earner is now entering the labour force. It is assumed that OAS and GIS benefits maintain their existing relationship to the level of average wages and salaries and that employees and employers each pay C/QPP contributions of 3.6% of earnings up to the level of average wages and salaries in order to cover the full cost of future benefits. (This compares with the present situation under which the employer and the employees each make contributions equal to 1.8% of earnings up to about three-quarters of the level of average wages and salaries.)

The graph shows, for those in the various earnings deciles, the proportion of average pre-retirement consumption levels (or living standards) that will be maintained by OAS, GIS and C/QPP. "Full maintenance" means that average pre-retirement living standards are fully maintained in retirement.

FIGURE 10

Extent to Which Pre-retirement Living Standards are Maintained After Retirement by the Public Pension Programs(1)



(1) The C/QPP replaces 25% of pre-retirement earnings up to the level of average wages and salaries. The employee pays one-half of full cost C/QPP rates. Taxes, transfers and UI premiums are based on their 1977 values, the same year in which the earner enters the labour force.

Three points should be noted about Figure 10. Firstly, the public pension system will more or less maintain the pre-retirement living standards of one-earner couples who have low incomes during their working years. This is due to the greater relative importance of the OAS to those with low incomes and to the additional assistance available under the GIS. Secondly, those who have pre-retirement incomes in the middle ranges will encounter significant reductions in levels of well-being when they retire if they depend solely on the public programs. Thirdly, GIS benefits will be payable to all couples with no pension, annuity or investment income other than pensions from the C/QPP. In comparable figures for single people and for two-earner couples, the public pension programs are shown to maintain a smaller proportion of pre-retirement living standards than in the case of the one-earner couple.

Figure 10, then, makes clear that if those in middle-income groups are to have their pre-retirement living standards maintained in retirement, benefits from public plans must be supplemented by income from employer-sponsored pension plans or from investment. But previously it was indicated that:

- at any point in time, only around half the full-time paid employees in the 25 to 64 age range working for private sector employers are members of employer-sponsored pension plans;

- since many years of service are usually required before vesting is achieved, many pension plan members accumulate little or no pensionable service;

- only a handful of plans adjust the value of deferred pensions; and

- pensions, once in pay, are, in general, seriously eroded by inflation.

Although a precise estimate is impossible, an analysis of the retirement income position of those now of working age suggests that, if present private saving patterns are more or less maintained, and if no significant improvements take place in the coverage, vesting and indexing aspects of employer-sponsored pension plans, between one-third and one-half of those now of working age and with incomes in the middle ranges are likely to encounter significant reductions in their living standards in retirement.

Thus, if commonly adopted poverty definitions are accepted, and if it is the case that Canadians generally wish to maintain their working life living standards in retirement, and are ready to pay the costs, the following conclusions emerge:

- single GIS recipients who live alone in unsubsidized rental accommodation need additional benefits;

- many of the current elderly who were in middle-income groups before they retired are less well off now than they were when they were working; and

- the maturation of the C/QPP will improve the situation somewhat, but a significant proportion of middle-income groups now in the labour force will encounter significant reductions in their living standards in retirement. This suggests that the retirement income system is too small.

B. The Allocation of Retirement Income

Closely related to the problems of the present and anticipated size of the retirement income system are three problems that may be characterized as 'allocational' in nature:

- some of those with employer-sponsored pensions are well protected for inflation, while many others are not;

- short-service employees are badly treated in the employer-sponsored pension system; and

- the treatment of spouses in earnings-related plans - public and employer-sponsored - is inadequate.

So long as the pension treatment of participants differs on these grounds, important problems will remain in the system - whatever its size.

1. Pension Plans and Inflation. It is obvious that if pension payments are not adjusted for inflation their real value will shrink over time. Table 10 indicates the magnitudes involved for several rates of inflation and time periods. If the annual rate of inflation is 3% and a $1.00 pension is unindexed, its real value will fall to 74 cents in 10 years. With 8% inflation and a 15-year time period, the real value of the $1.00 pension falls to 32 cents. Thus, even for those of the elderly who do receive some pension from former employers, the fact that most such pensions are not maintained in real terms means declining living standards as their recipients move through retirement. Since women, on average, live longer than men, this lack of protection from inflation has somewhat more serious consequences for women with employer-sponsored pensions than it does for their male counterparts.

Table 10

The Value of $1.00 in Purchasing Power with Annual Inflation Rates of 3, 4, 5 and 8% Per Annum

	3%	4%	5%	8%
			($)	
After 5 years	0.86	0.82	0.78	0.68
After 10 years	0.74	0.68	0.61	0.46
After 15 years	0.64	0.55	0.48	0.32
After 25 years	0.48	0.38	0.30	0.15

The inflation problem is classified as allocational in nature since the losses in real income that unindexed pension plans entail for pensioners generally represent gains for others - employers, employees, shareholders, current plan members, governments.

Some argue that the needs of the elderly decline as age increases; they therefore argue that the effect of the decline in the real value of employer-sponsored pensions is not as serious as might be first thought. This conclusion is rejected here; if it is the case that pension plan members wish to have pensions whose real value declines through the retirement period, then it seems reasonable that plans should be explicitly designed to produce such an outcome. Real pension income should not be determined by a factor as haphazard and arbitrary as the rate of inflation.

2. Long- and Short-Service Employees. The second of the three allocational problems is that in the employer-sponsored pension system long-service employees are favoured to the detriment of short-service employees. The earlier descriptive section outlined the principal reasons: in many plans employees must work several years before they achieve vested status. Most of those who do achieve vesting are badly treated if they leave the employer since the real value of their deferred pension is almost never maintained between the time they leave the plan and the time they retire; those terminating employees, whether vested or not, who 'cash out' of contributory plans receive no pension benefits from their employer. In addition, early retirement provisions, which provide long-service employees with unreduced pensions before the plan's normal pensionable age, work to the disadvantage of short-service employees who contribute directly or indirectly into the pension fund but do not qualify for such benefits. Since, on average, women are more likely to be short-service employees and to have interrupted work histories, this second allocational problem has particularly serious consequences for them.

While employers may well have reasons for designing their pension plans so as to concentrate the bulk of the benefits in the hands of long-service employees, this particular allocation of pension benefits is obviously undesirable when examined against the wider perspective of public policy objectives.

3. Spouses of Pension Plan Members. The third allocational problem arises because the retirement income system typically treats spouses of pension plan members poorly. There are three particular areas of concern.

Firstly, survivorship provisions in the employer-sponsored pension system are generally inadequate. Only some 45% of plan members in 1976 belonged to plans which, on the death of the member after retirement, provided automatically for the payment of pensions to their spouses.

Secondly, the survivorship provisions in the C/QPP do not treat spouses equally. If, for instance, the husband has a CPP retirement pension of $2,000, on his death a survivor's pension of $1,200 is paid to his wife. If, on the other hand, his wife dies first, the full retirement pension of $2,000 continues in pay to the husband.

Finally, pension credits in the employer-sponsored pension system are not split on marriage breakdown. This is in contrast to the C/QPP, where, on marriage breakdown, the pension entitlement accrued during the period of the marriage is divided equally between the former partners.

These provisions all work to concentrate most pension income in the hands of those who originally established eligibility for the pension. Since the spouses of these individuals are often homemakers who do not receive employment earnings (and who therefore cannot participate in the C/QPP), this allocation of benefits raises particularly serious questions.

If the earnings-related pension system were enlarged only by expanding coverage and increasing benefit formulae, the allocation of benefits from the enlarged system would continue to raise serious questions of equity. So long as protection from inflation is absent or is provided only to some, short-service employees continue to receive little if any pension credits in respect of their service, and spouses and former spouses of plan members continue to receive little or no share of the pension benefits earned by their partners, this will remain the case.

C. The Economic and Institutional Effect of the Retirement Income System

1. Economic Effects. The effect of the retirement income system, and more particularly of the public pension programs, on the size and composition of the capital stock is an issue of great importance and one that has occasioned a good deal of recent debate. A problem underlying the debate is lack of agreement concerning the process by which the capital stock is formed. Some argue that if saving in a particular sector is lower than otherwise due to some identifiable factor, then that factor is responsible not only for the lower saving but also for less investment and a smaller capital stock than otherwise. Others argue that the process of capital formation is more complicated, depending ultimately on the expectations of entrepreneurs.

Those holding the first view are concerned, for example, that the C/QPP contribution rates are well below the level that will eventually be required to pay for the benefits being earned. Since it is widely agreed that the existence of these plans reduces the level of personal savings in employer-sponsored pension plans, they fear that unless the public plans are fully funded, saving levels in the economy generally will be lower, and the size of the capital stock smaller, than otherwise.

A second group argues that what counts in the process of capital formation is the expectations entrepreneurs have of future profits; if these are buoyant, capital formation will be financed from retained earnings and from borrowings at home or abroad. A related view is that less than fully funded pension programs will have little effect on saving and the capital stock since, to a large extent, these programs replace intra-family transfer arrangements where the younger generation paid for the consumption of the older generation from current earnings.

While there is no conclusive proof as to the effect of the Canadian public pension programs, what evidence there is suggests that

if the C/QPP have had an effect on saving levels and on the size of the capital stock, the effect has been small.

The effect of the retirement income system on the composition of the capital stock is a related question. Again, conclusive proof is lacking; but the fact that the public sector is financed to a significant extent by pension funds for which less than market rates of interest are often paid, suggests that it might well be the case that the public sector capital stock is larger than it would have been had this form of financing not been available.

The lack of evidence concerning the economic effect of the public pension programs does not mean that these issues should be dismissed. On the contrary, the issues here are so important that care must be taken to ensure they receive adequate debate and discussion.

2. Institutional Effects. An earlier section indicated that pensioners lose when the real value of their pensions is not maintained in an inflationary environment. It is normal in such an environment for the nominal returns earned by pension funds to rise. If this occurs, but pensions-in-pay are not adjusted, then, if other things are equal, the employer's pension costs will fall.

It is not typical, however, for rates of investment return on most types of securities to always and completely reflect inflation. Indeed, on securities with a medium to long term to maturity, inflation-adjusted rates of return typically rise and fall sharply, leading to substantial volatility in employer pension costs - a volatility which increases the more fully indexed pension plans are. As well, the long-run cost of a fully indexed plan is uncertain under these circumstances since it is impossible to know in advance whether a period of low inflation-adjusted rates of return will be balanced by higher rates in the future. This means that defined benefit pension plans entail substantial risks for those employers who offer them. Thus, employers with direct or secondary access to a tax base and employers in the private sector with large financial resources would be more likely than others to accept the risk associated with an undertaking to maintain the real value of pensions. As a result, pensioners who formerly worked in the public sector or for large corporations receive, on average, better treatment in this respect.

Besides affecting employers, the retirement income system has important implications for governments. Demographic changes over the next 50 years, for example, will directly affect government expenditures. In 1976, expenditures of all levels of government equalled 40.2% of GNP. If the per capita levels of government services and programs are maintained in real terms, by 2031 it is estimated that demographic changes alone will have raised this percentage to 44.8% of GNP. The C/QPP play a dominant role in this increase. The larger share of the elderly in the population will cause the costs and benefits of those programs to grow; also important, though, is the fact that by 2031 all of the elderly who had pre-retirement earnings will be receiving C/QPP pensions. Given the relative newness of the plans, this is not now the case.

These demographic shifts will have different effects by level of government. It is estimated that federal expenditures as a percentage of GNP will rise while in the case of provincial and local governments, expenditures as a percentage of GNP are expected to fall.

IV. OVERCOMING THE PROBLEM IN THE RETIREMENT INCOME SYSTEM

An earlier section suggested that public policy with respect to the elderly has been motivated by two broad objectives - alleviating poverty and assisting people to divide their lifetime consumption between their work years and their retirement years in some appropriate way. The preceding section concluded that some of the elderly are in severely straitened circumstances and that many others are significantly less well off now than they were before retirement. While measures already in effect will improve the situation somewhat, without further changes these conditions will continue to exist in the foreseeable future.

Since the most serious shortcomings rest with the income replacement part of the retirement income system, most of the rest of the present discussion centres around four options for the reform of earnings-related pension plans. The options differ markedly from one another, running the gamut from measures to strengthen the employer-sponsored pension system to the displacement of a large part of the system by enlarged public plans. The options were developed as alternative means of reforming Canada's retirement income system - each would deal in varying degrees with the shortcomings that have been identified. Actual reform might, of course, be based on measures listed under any of the four options.

Before dealing with these options, however, three other issues should first be considered: how to improve the position of the elderly poor, what the future course of OAS and GIS benefits should be, and how to ensure that pensions from employer-sponsored pension plans are more or less maintained in the face of inflation.

A. The Elderly Poor

It has been shown that some of the elderly are in severely straitened circumstances. In greatest difficulty are those who now receive the GIS and who live alone in unsubsidized rented accommodation. Extra resources would go furthest in alleviating poverty among the elderly if concentrated among this group.

Two general approaches available for assisting this group have been considered. The first is to redesign the GIS program. For example, the GIS single rate for those who live alone in unsubsidized rented accommodation could be increased. Alternatively, the GIS program could be redesigned to provide a 'shelter cost' component in addition to the basic benefit. This might be calculated, for example, as a percentage of rent or property taxes paid. Since the per capita shelter cost for single elderly unsubsidized renters is usually higher than, for example, that for couples who live in their own houses, altering the GIS in this way would concentrate resources on those most in need.

A second means of achieving this objective would be to construct and subsidize more housing for the elderly.

B. OAS and GIS Benefits

When the economy experiences real growth per capita and transfer payments like the OAS and GIS are indexed only to the CPI, as currently

is the case, their relative importance over time will decline. Under these circumstances, OAS and GIS recipients do not share the fruits of economic expansion. For this reason, consideration should be given to increasing the benefits from these programs automatically, or from time to time, on an ad hoc basis so that they reflect per capita economic growth. Linking the benefit levels to a standardized measure of average wages and salaries would have this effect.

C. Maintaining the Real Value of Pensions and Annuities

The very serious effect that inflation can have on the real value of pensions was underlined previously. Also discussed were the substantial risks that indexed pension plans entail for many employers. Despite these difficulties, if the real value of such pensions is allowed to erode to the extent that occurred in the 1970s, the whole employer-sponsored system could well be seriously called into question.

Four techniques that would facilitate the maintenance of real pension values have been considered. Each would improve the situation for present and future pensioners. (A fifth technique, indexed bonds, was considered and rejected.)

Under the first two techniques, all pensions and annuities established for retirement purposes would be increased in line with the inflationary earnings' of:

1. the individual pension fund; or

2. a prescribed portfolio of securities.

Under the third and fourth techniques, employer-sponsored pensions and annuities established for retirement purposes would be indexed to prices, with assistance provided by government through:

3. a stabilization facility; or

4. a real rate annuity facility.

Each of the first two techniques listed above would ensure only that the earnings of pension funds deemed to be associated with inflation were distributed to pensioners. This would not guarantee that real pension values would be fully maintained in relation to prices; each technique would, however, improve the position of those pensioners whose former employers now do little or nothing to adjust pension values.

Under the first listed technique, pension plans would be required by legislation to adjust pensions-in-pay annually by a factor that reflected the extent to which the fund's nominal return in the previous year exceeded a legislated rate of return. The legislated rate of return might, for example, be the average inflation-adjusted rate of return earned by pension funds over the past two decades. Under this approach, if the legislated rate of return were 3 1/2% and a pension fund earned an 8% return in one year, pensions-in-pay would be increased in the next by around 4 1/2%. If the rate of inflation was less than 4 1/2% in that year, funds would be 'banked' for use when the inflationary earnings were insufficient to increase pensions in line with the CPI.

Table 11 gives some idea of what the effect of this first alternative would have been had it applied over the 1962-1978 period to a pension fund whose annual investment experience was that of the median pension fund in Canada. The results for individual plans would have differed to the extent that their investment experience differed from that of the median fund. (Table 11 assumes that earnings in excess of 4% annually were inflationary earnings.)

Table 11

The Real Value (in Constant 1962 Dollars) of a $1.00 Pension Commencing in 1962

	Indexed to the Annual Rate of Change in the CPI up to the Limit of Inflationary Earnings of the Median Pension Fund	Indexed to the Consumer Price Index	Unindexed
	(1)	(2)	(3)
1962	1.00	1.00	1.00
1964	1.00	1.00	.97
1966	1.00	1.00	.91
1968	.97	1.00	.84
1970	.98	1.00	.78
1972	.92	1.00	.72
1974	1.00	1.00	.61
1976	.81	1.00	.51
1978	.72	1.00	.43

The table indicates that under this first approach pensions from the hypothetical pension plan would have had their real value more or less maintained until the mid-1970s. Significant erosion would have occurred in the following four years as rates of investment return were low compared to rates of inflation; but the outcome would have been much superior to the unindexed pension case shown in Column 3.

Under the second alternative listed above, pension values would be required to be indexed to the rate of return on a prescribed portfolio of securities whether or not individual pension funds in fact held their assets in a portfolio of similar composition. Table 12 indicates what would have been the real value in 1962 dollars of three pensions of $1.00 commencing in that year if the pensions were indexed to the annual rate of change in the CPI up to the limit of the inflationary earnings of a portfolio invested entirely in 90-day finance company paper, a portfolio of conventional mortgages, and one of industrial bonds. The data in Table 12 indicate that had such an approach been in effect since 1962, indexing to the rate of return on a mix of securities with a short to medium term to maturity - as illustrated by the results for finance company paper and conventional mortgages - would have produced, in the case of the hypothetical plan, an increase in benefits that approximately matched the increase in the Consumer Price Index until the mid-1970s.

Table 12

The Real Value (in Constant 1962 Dollars) of a $1.00 Pension Indexed to the Annual Rate of Change in the CPI up to the Limit of Inflationary Earnings of a Pension Fund Invested Wholly in One Class of Security

	90-Day Finance Co. Paper	Conventional Mortgages	10 Industrial Bonds
Non-inflationary rate(1)	2%	4%	2%
1962	1.00	1.00	1.00
1964	1.00	1.00	1.00
1966	1.00	1.00	1.00
1968	1.00	1.00	.97
1970	1.00	.97	.89
1972	1.00	1.00	.84
1974	1.00	1.00	1.00
1976	.99	.90	.86
1978	.99	.92	.83

(1)In all three cases, the non-inflationary rate chosen was approximately equal to the difference between the compound rate of growth of the nominal rate of return of each type of security and the compound rate of growth in the CPI over the ten years ended in 1961.

This second alternative would entail greater risk for employers than would the first unless the employer invested his pension assets in the type of securities that make up the prescribed portfolio. Such a strategy, however, would likely entail extra pension costs given the lower inflation-adjusted rates of return usually associated with securities having a short to medium term to maturity. The second alternative would, compared to the first, provide more uniform treatment to pensioners to the degree indicated in Table 12, depending on the composition of the prescribed portfolio.

Under the third and fourth alternatives listed above, pensions-in-pay would be indexed to the CPI. Pensioners would be entirely relieved of the risk associated with declines in the real value of their pensions, but employers would face substantial risks. Under alternatives three and four, governments would assist employers in preserving the real value of their pension assets in order to eliminate such risks.

Under the third listed scheme - the stabilization facility - the government would help pension funds and recipients of annuity payments for retirement purposes to preserve the inflation-adjusted rate of return earned on pension assets by transferring credits to pension funds in years when the inflation-adjusted rate of return available on financial assets was below, say, the previous 15-year average. Pension funds would transfer credits to the government in the reverse situation. The effect of the stabilization facility would be to provide employers with greater certainty of pension cost - certainty which derives from the fact that governments stand behind the facility, evening out good and bad times.

The fourth approach - the real rate annuity scheme - is similar to the third. Rather than adopting recent inflation-adjusted rate-of-return experience on financial assets to determine the direction and amount of payments between pension funds and the government, a specific rate would be chosen - say 2%. Those who pay pensions would be required to use this rate in calculating the cost of pension plans. When a pension or annuity came into pay, long-term government bond yields would be studied to determine the level of inflation anticipated by the capital market. A 9% coupon on new bonds, for example, would establish that inflationary expectations were at the 7% level. If subsequent inflation were at this level, no assistance would be provided to employers. If the rate of inflation fell below 7%, the pensions paid by employers would be smaller than expected. The funds saved would be transferred to the government. In years when the rate of inflation exceeded 7%, funds would flow from the government to the employer or to the agency paying the pension/annuity.

Each of the four alternatives involves a different distribution of risk associated with the uncertain future. The first, for example, places much risk on the pensioner's shoulders; the last spreads the risk over the whole population. Which of the four is preferred will depend in part on what other reform measures are adopted with respect to earnings-related pension plans. It is to these other reform measures that attention is now directed.

D. Four Options for the Reform of Earnings-Related Pensions

The three reforms just discussed - improving the position of the elderly poor, linking changes in OAS and GIS benefits to changes in average wages and salaries, and maintaining to one extent or another the real value of pensions - would significantly improve Canada's retirement income system. They merit early attention regardless of what other reforms are undertaken. This section examines a number of other important changes to the retirement income system. All relate to earnings-related pensions and would deal in varying degrees with existing problems in the system that have been identified.

Four options for the reform of earnings-related pensions are discussed below:

1. strengthening the current employer-sponsored pension plan;

2. gradually eliminating defined benefit plans and encouraging their replacement by defined contribution plans;

3. requiring all employers to offer, and all employees to join, employer-sponsored pension plans that provide for at least a specified minimum scale of benefits and other provisions established by legislation; and

4. enlarging the C/QPP, with or without a provision under which employers offering comparable pension benefits might 'contract out' of the enlarged segment of the national program.

Under Options 1 and 2, employers who offered plans would be required to design them to meet specific conditions. Under Options 3 and 4 employees would be required to be members of either an employer-sponsored plan providing a specific level of benefit (or contribution) (Option 3) or an enlarged C/QPP (Option 4).

Under the first two options, the proportion of workers covered by the employer-sponsored system would likely remain at about current levels. It also seems reasonable to assume that the total amount of pension benefits flowing out of the employer-sponsored system would not change significantly. If this were the case, the effect of Options 1 and 2 would be largely allocational - that is, the distribution of benefits would be improved, but not the aggregate amount of future pension payments. Under Options 3 and 4, complete coverage and minimum benefit (and contribution) levels - as well as design features to assist short-service employees and spouses of plan members - would be required. Thus, the implementation of either of these options would lead to larger future pensions, together with an improved allocation of pensions.

1. Option 1: Strengthening the Current Employer-Sponsored Pension System. Option 1 is made up of six measures that would improve the current employer-sponsored pension system:

- earlier locked-in vesting (at, for example, age 30 and after 2 years of service) so that more mobile plan members ultimately receive pensions;

- updating of such deferred pensions so that the pensions ultimately received by terminated employees in respect of service with a former employer would not be significantly less than the pensions they would have received in respect of those years of service had they remained with that same employer;

- prohibition of early retirement on unreduced pensions for long-service employees so that treatment of long- and short-service employees is more equal;

- maintenance of the real value of pensions-in-pay and life annuities through one of the techniques discussed above;

- compulsory two-thirds survivorship provisions so that spouses are ensured pension protection; and

- splitting of employer-sponsored pension credits on marriage breakdown (as in the C/QPP) so that the pension treatment of the partners of a broken marriage is equalized.

The first three measures would concentrate a higher proportion of the system's benefits in the hands of pensioners who had many employers during their work years and who are currently placed at a serious disadvantage by employer-sponsored pension plans that, to varying degrees, favour long-service employees. The last two measures would concentrate a higher proportion of the system's benefits in the hands of spouses - or former spouses - of plan members.

These Option 1 requirements, together with the maintenance of real pension values, would entail little or no extra employer cost for those employers whose plans already include these or similar provisions, or for those who offset the extra costs by reducing other benefits and/or raising employee contribution rates. On the other hand, for plans which now have no survivorship provisions, require several years of service before vesting is achieved, and make little or no adjustment of pension payments or deferred pensions for inflation, the Option 1 requirements could add employer costs of up to 6% of payroll.

As noted, Option 1 would allocate pension benefits more fairly among plan members. The coverage of the employer-sponsored pension system would be unlikely to increase under Option 1 and, indeed, it would decline if some employers dropped their plans to avoid being obliged to meet the new requirements.

2. Option 2: Gradually Eliminating Defined Benefit Plans and Encouraging Defined Contribution Plans. Since many of the problems with the employer-sponsored pension system are considered by some to be inherent in the nature of defined benefit plans, Option 2 contemplates the gradual elimination of such plans, which now cover 95% of plan members, and their replacement, with defined contribution plans. Under these latter plans employers, and often employees, contribute annually to the employee's pension account what is usually a fixed percentage of the employee's earnings; the employee's pension at retirement depends on the size of the annuity that these past contributions - together with their earnings - will buy. (By contrast, under defined benefit plans employers provide a pension usually based on years of service and level of earnings.)

The defined contribution plans would be required to provide for full and immediate vesting and locking in of all contributions; annuities purchased at retirement would be required to include provision for the spouse. As under Option 1, one of the four alternative mechanisms for maintaining the real value of pensions would apply to the annuities once in pay. (There would, however, be no requirement on employers to update deferred pensions; their future value would depend on past contributions and the investment returns they earn.)

The essence of Option 2 is that the system's participants would (after a suitable period of transition) all be on an equal footing. All would, up to retirement at least, take their chances regarding the investment returns earned by their contributions. The capacity for differing treatment of employees in similar positions would be much smaller than it is now. With defined contribution plans, employers would bear no risk. The corollary is that pensioners would bear risk as do other savers. As with Option 1, the use of some of the techniques for maintaining the real value of pensions, once in pay, leaves open the possibility that some pensioners would receive more complete protection from inflation than would others.

The net cost of Option 2 to an employer would depend on the difference between what he is now contributing to a pension plan and the employer contribution rate that the new defined contribution plan would entail. For an employer now offering a typical defined contribution plan, the full and immediate vesting requirement would add costs equivalent to about 1% of payroll.

3. Enlarged Mandatory Earnings-Related Pension Plans. The last two options for reforming earnings-related pension plans each require that all employees belong to earnings-related pension plans providing a prescribed level of benefits. The plans would be operated either by employers (Option 3) or by the government, as is now the case with the C/QPP (Option 4). Before examining these two options, a prior question must be considered: if an enlarged mandatory earnings-related pension system is to be the basis of reform, how big should it be?

There is, of course, no single answer to the question. It clearly involves a matter of individual judgment. For purposes of the report, however, it was assumed that the objective of most Canadians would be a pension system that made it possible for them to more or less maintain in retirement the same standard of living experienced during the years they were of working age. Figure 10 on page 29 showed the extent to which the current public pension system will maintain the living standards of those now entering the labour force. Recall that it is assumed in the figure that OAS and GIS benefit levels maintain their present relationship with average wages and salaries, and that the cost of the 25% C/QPP pension to new entrants to the labour force in respect of earnings up to the level of average wages and salaries is fully covered by the contributions of employers and employees. The basic question, then, is how the substantial gap that now exists between the full maintenance line and the current public programs should be reduced or eliminated.

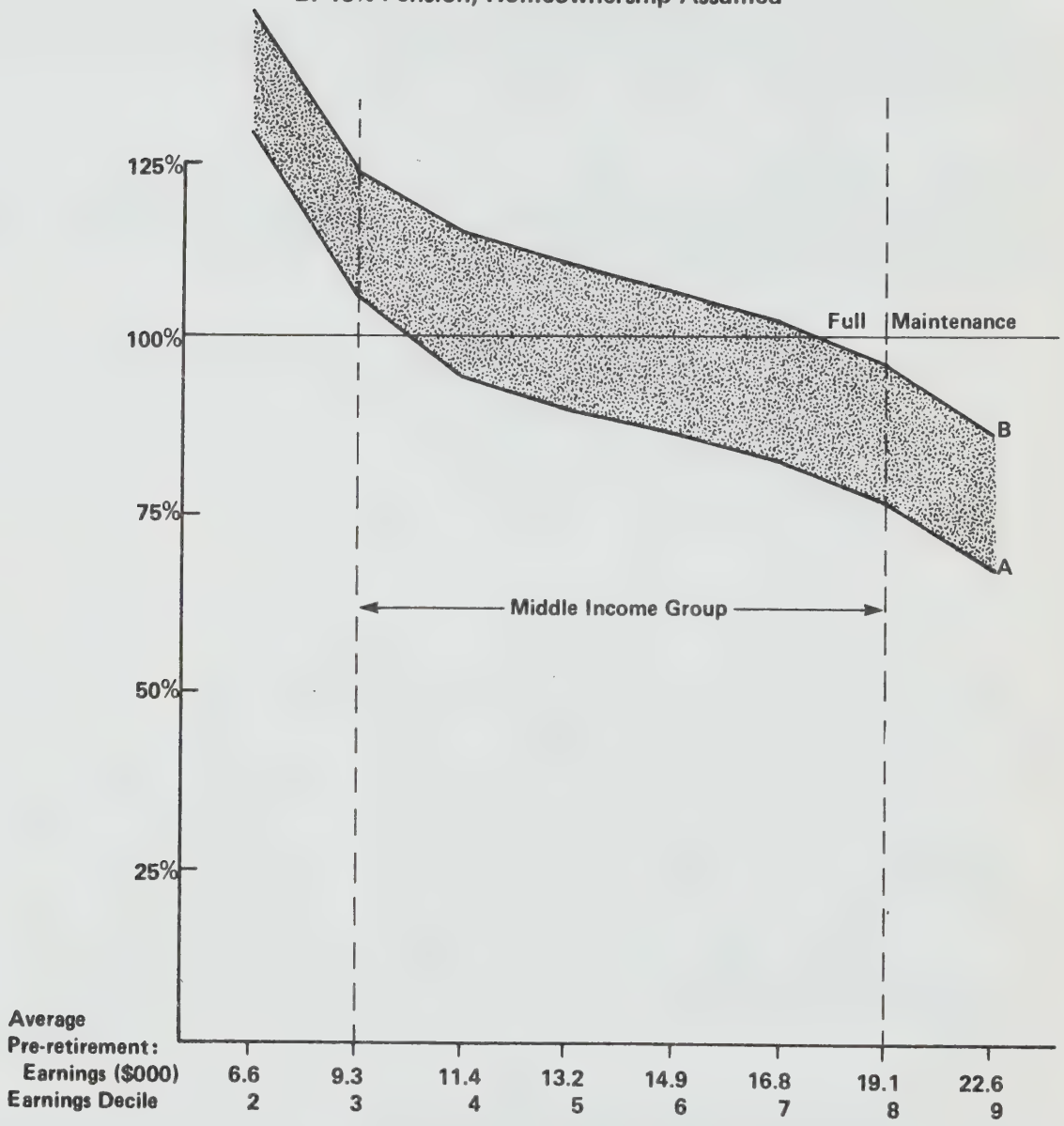
In designing a retirement income system involving enlarged mandatory earnings-related pension plans, an important issue that arises is what, if any, account should be taken of private saving for retirement. Should the design of an enlarged plan take account of the fact that some people save privately for retirement, or should the aim be to design a system under which the pension income of the great majority of the elderly is itself sufficient to meet their retirement needs?

Figure 11 illustrates the implications for one-earner couples who are now entering the labour force of two alternative pension and private saving combinations. The lower line (A) shows the extent to which the OAS, together with an earnings-related pension which replaces 40% of average pre-retirement earnings, up to an amount equal to 1.5 times average wages and salaries, maintains the living standards of one-earner couples who make no other provision for retirement beyond the taxes and contributions that support these plans. The top line (B) shows the extent to which the OAS, plus a slightly larger pension plan - one that replaces 45% of average pre-retirement earnings - maintains the living standards of one-earner couples who also save during the pre-retirement period through the purchase of a home.(5)

(5)It is assumed that the couple enters retirement 'mortgage free' (thereby saving the additional expenses involved in renting) and that the house is owned and occupied until the death of the last surviving spouse at which time it forms part of the estate.

FIGURE 11

Extent to Which Pre-retirement Living Standards are Maintained After Retirement by the OAS and by:
A. 40% Pension, No Additional Private Saving
B. 45% Pension, Homeownership Assumed



The figure indicates that, when homeownership is taken into account, the living standards of one-earner couples with pre-retirement earnings in the middle range would be more or less maintained by a pension system that included the OAS (the benefits of which increased over time

with average wages and salaries), and an earnings-related pension that replaced in the range of 40-45% of average pre-retirement earnings. Those with pre-retirement incomes towards the top of the middle-income range with no private savings would encounter fairly substantial reductions in living standards if the pension system replaced only 40% of pre-retirement earnings. On the other hand, lower middle-income homeowning couples would, with a 45% pension, be somewhat better off after retirement than before.

Figure 11 makes clear that the extent to which a pension system of a given size maintains the pre-retirement living standards of its participants depends both on the extent to which the participants save privately and on their income levels. (Although not shown, marital status and labour force status of spouses are also important; comparable figures for single people and for two-earner couples would have shown living standards maintained to a lesser extent than in Figure 11.) Given these variations, it is clear that no single pension system will meet the needs of all its participants equally well. On the basis of the results portrayed in Figure 11, however, it was concluded that OAS plus an earnings-related pension replacing 40-45% of average earnings up to 1.5 times average wages and salaries would more or less maintain the living standards of middle-income people. For purposes of Option 3 - mandatory employer-sponsored pension plans - this result translates into a pension plan with a 1% unit benefit, that is, one that provides benefits equal to 1% of revalued career earnings for each year of work. The Option 3 plans would be integrated with the C/QPP. The aggregate benefits disbursed by such a pension system would roughly correspond in size to those disbursed by the 45% pension plan illustrated in Option 4.

Two points need to be emphasized with respect to these options. Firstly, part of the 45% replacement on earnings up to the level of 1.5 times average wages and salaries is already provided by the C/QPP. These plans now provide 25% replacement up to about three-quarters of average wages and salaries; as noted earlier, in several years the 25% replacement will be in respect of earnings up to the level of average wages and salaries. Secondly, some - mainly longer-service members of employer-sponsored pension plans - can now expect to receive pensions that, together with the existing C/QPP pensions, will replace 45% or more of their pre-retirement earnings. Consequently, the adoption of Option 3 would not alter the basic benefits to which they are now entitled. With the adoption of Option 4, however, benefits from the enlarged mandatory plan would likely displace a significant proportion of the existing employer-sponsored pension system.

4. Option 3: Requiring All Employers to Offer and All Employees to Join Employer-Sponsored Pension Plans. Under Option 3, all employers would be required to provide a pension plan and their employees required to join it. Employers would be given the choice of offering:

- a contributory defined benefit plan that would provide a pension equal to 1% of average earnings per year of service (revalued to take account of growth in average wages and salaries);

- a contributory defined contribution plan requiring contributions of 2.4% by the employee and the employer for employees earning at the level of average wages and salaries; or

- a combination of the above under which the employer would pay for the defined benefit portion (which would equal 0.5% of average revalued earnings per year of service) and the employee would contribute to the defined contribution portion.

These plans would cover all full-time employees, provide for full and immediate locked-in vesting, and the updating of deferred pensions by an index based on the growth of average wages and salaries. Such plans would also contain a two-thirds survivorship provision and accrued pension benefits would be split on marriage breakdown. As in Options 1 and 2, one of the four techniques for maintaining real pension values outlined above would be adopted.

Most employers who do not now offer a pension plan would likely choose to offer the defined contribution plan, given its greater certainty of cost and the relative ease of administration. To reduce the administrative burden of operating defined benefit plans with full and immediate vesting provisions, employers would be given the option of paying terminating short-service employees a double refund of their contributions (plus interest) rather than a deferred pension. Employees receiving such refunds would be required to invest them in an RRSP, or a similar vehicle, where they would be locked in until retirement.

Under Option 3, the pension system would be significantly enlarged. By the time the system matured, most of those in middle-income groups would enter retirement with earnings-related pensions that would, together with the OAS, more or less maintain pre-retirement living standards. Other important advantages of Option 3 are that employer-sponsored pension plans would be standardized and hence easier to understand and that pension assets would continue to be allocated through markets.

Opponents of this approach point to the increase in the degree of government intervention it would entail. As well, they emphasize the administrative burdens of the option which would bear heavily on smaller employers who did not join multi-employer plans. Those opposing compulsory employer plans also argue that the non-compulsory aspect of the present employer-sponsored system is not simply one of its features, but rather its central tenet. (This argument ignores the fact that the great majority of present members of employer-sponsored pension plans had to join them as a condition of their job.) Those who acknowledge the need for a larger pension plan, but who see difficulties with the Option 3 approach, usually argue for an expanded C/QPP.

Mandatory employer-sponsored pension systems that apply to most employees exist in some European countries (France and Sweden, for example). Others (the Netherlands and Switzerland) are at present developing systems designed to cover all employees.

5. Option 4: Expanding the Canada and Quebec Pension Plans. Under Option 4, the two public earnings-related pension plans would be enlarged so that they replaced 45% of average pre-retirement earnings up to 1.5 times average wages and salaries. (While the preceding section suggested an enlarged mandatory plan should provide replacement income of between 40-45%, the 45% figure is adopted in the case of Option 4 for costing purposes.)

An enlarged public pension system could be more economically administered than the present host of private plans. Under the public plans vesting is, in effect, already full and immediate, pensions are based on 'revalued' earnings, and adjustment for inflation, as measured by the CPI, is complete. A survivorship provision already exists. Requiring the reduction of C/QPP retirement pensions on the death of the first spouse, rather than only on the member's death, would equalize the treatment of marriage partners. (The saving here would more or less cover the incremental cost of increasing survivors' pensions from 60% to 66 2/3% of retirement pensions.) Splitting of pension credits on marriage breakdown is already provided for.

One objection registered against enlarging the C/QPP is that the level of saving in the economy would be adversely affected. As noted earlier, it is not clear that this concern is well founded. But the issue is of such importance that, if larger public earnings-related plans were adopted, consideration should be given to funding at least partially the expanded system and allocating a proportion of the accumulated funds through capital markets. (This contrasts with the present system under which all CPP funds are loaned directly to provincial governments.) Even if funds were allocated through capital markets, concern could remain that governments might unduly influence the allocation of funds.

A variant of Option 4 would entail an enlarged public earnings-related plan, but would also allow employers who undertook to provide comparable benefits to 'contract out' of the enlarged segment of the public plans. Thus, employees working for employers who chose not to contract out would contribute to the public scheme; those working for employers who contracted out would contribute to a plan that was sponsored by the employer but was more closely regulated than now by the government. To provide for full portability of employee benefits, a high degree of comparability between the contracted-out plans and the enlarged segment of the state plan would be required; contribution rates, for example, would have to be similar. Moreover, once started, the public plan would have to be kept relatively stable; benefits could not be increased on short notice, since without a reasonable phasing-in period, contracted-out employers would not be in a position to finance them.

The advantage of the contracting-out approach is that a significant proportion of pension funds, though not as high a proportion as under Option 3, would be automatically allocated through capital markets. Under Option 4, a specific 'recycling' mechanism would be required to achieve this result.

6. Costs of an Enlarged Mandatory Earnings-Related Pension System (Options 3 and 4). The costs of adopting an enlarged mandatory earnings-related pension system through Option 3, Option 4, or the contracting-out variant of Option 4 are examined here from two perspectives. Table 13 portrays the costs of the enlarged mandatory earnings-related pension plan together with the estimated costs of the voluntary retirement income programs and of the OAS and income-tested programs; costs are expressed as a percentage of all earnings (wages, salaries, military pay and self-employed earnings). Table 14 focuses attention on the costs of mandatory earnings-related pension plans; there, costs are expressed as a percentage of the earnings of individual employees.

Table 13

Estimated Amount of Contributions or Taxes Directed to Major Retirement Income Programs Under Several Assumptions, as a Percentage of Total Earnings

	C/QPP	OAS	Income-Tested	Total Public Programs	RPPs(1)	RRSPs	Total
				(%)			
1. Actual 1976	2.0	2.9	1.2	6.1	3.8	1.9	11.8
2. Actual 1976, with C/QPP valued on basis of benefit accrual (full cost)	3.9	2.9	1.2	8.0	see note below <3.8	<1.9	<13.7
3. Actual 1976, with C/QPP mature so that YMPE = AWS, on basis of benefit accrual	4.3	2.9	1.0	8.2	<3.8	<1.9	<13.9
4. Full current service cost, mature basis, for present pension system, including OAS and income-tested elements	4.3	3.8	1.1	9.2	<3.8	<1.9	<14.9
5. Enlarged mandatory system - included here with C/QPP; no displacement assumed	8.8	3.8	0.3	12.9	<3.8	<1.9	<18.6
6. Enlarged mandatory system - included here with C/QPP; with illustrative displacement	8.8	3.8	0.3	12.9	1.3	1.0	15.2

< = less than
YMPE = Year's Maximum Pensionable Earnings
AWS = Average Wages and Salaries

(1)Excludes cost of amortizing unfunded liabilities (1.2% of total earnings in 1976).

Note: Rising levels of contributions required for the present C/QPP arrangements and for an enlarged mandatory program may be expected to displace some portion of contributions to RPPs and RRSPs. No allowance has been made for this reduction in Lines 2 through 5, but Line 6 illustrates the situation if the proportion of RPP contributions displaced were about two-thirds and the proportion of RRSP contributions displaced were about half.

Line 1 of the table indicates that funds equivalent to some 11.8% of earnings went for retirement income purposes in 1976 (part of this amount financed pay-as-you-go programs, while part flowed to partially or fully funded programs). Line 2 shows the estimated costs of the 1976 system had the C/QPP contribution rates been at the level required to cover fully the cost of the benefits of new entrants to the labour force (assuming an inflation-adjusted rate of return of 3.5%). As noted earlier, the earnings ceiling of the C/QPP is at present below its planned-for level; Line 3 shows the effect on estimated costs in 1976 if the level of earnings covered by the C/QPP had reached its target level equal to average wages and salaries. In Line 4, OAS and GIS costs were recalculated so as to make them more directly comparable to the costs of the other programs. The higher numbers reflect the cost of the OAS/GIS if new entrants to the labour force had to finance such benefits for all those in the same cohort.

Line 4 indicates that the full, current service cost on a mature basis of all the major public and private retirement income programs as of 1976 would have amounted to something under 14.9% of total earnings, as compared to actual outlays in that year equivalent to 11.8% of earnings. All of this difference is in respect of the public programs and is accounted for by full costing of the C/QPP and the OAS on a mature, current service basis, offset by a marginal decline in the cost of income-tested programs. The net cost of public programs on this revised basis would amount to an estimated 9.2% of total earnings, compared to the actual cost in 1976 of 6.1%.

If the enlarged public pension system described earlier were adopted, the estimated cost of mandatory earnings-related pension plans would double, rising from 4.3% of earnings to 8.8% (comparing Line 4 and Line 5). The cost of the OAS would remain unchanged. The cost of the GIS and other income-tested programs, however, would be reduced from 1.1% of earnings to 0.3% because of the expanded earnings-related pensions available, with the result that the net increase in the cost of the public programs would rise from 9.2 to 12.9%.

The 'less than' signs in Lines 2 through 5 indicate that as contributions to mandatory pension plans increase, contributions to private arrangements would decrease. If there were no such displacement, and the full costs for the enlarged mandatory system were being charged, retirement income programs would absorb some 18.6% of earnings - over 50% more than current outlays. Line 6 shows the situation if the enlarged mandatory system displaced about two-thirds of contributions to Registered Pension Plans and about one-half of contributions to Registered Retirement Savings Plans. (Line 6 does not include any costs for enriching pensions of the current elderly or for the rapid phase-in of the new pension plans.)

Table 13, then, suggests that the present retirement income system entails costs in the form of contributions and taxes equivalent to just under 12% of all earnings. The full cost of an enlarged mandatory system given the displacement assumptions noted is estimated to be just over 15% of earnings. A substantial part of the increase in costs over

current levels is a result of the necessary adjustments relating to the present retirement income system. The additional costs associated with an enlarged mandatory system are lower than might be expected since the expansion of earnings-related pensions would reduce expenditures on income-tested programs and would displace a significant proportion of contributions to voluntary employer-sponsored pension plans and RRSPs.

A second perspective from which to view the costs of an enlarged mandatory pension system is that of individual employees and employers. Table 14 provides some illustrations of the increased contributions that an enlarged mandatory earnings-related pension plan would require of those at various earnings levels. Since the extent to which contributions would increase depends on the amount now being paid to employer-sponsored pension plans and to RRSPs, Table 14 shows the effect of an enlarged mandatory plan on three groups of individuals - those not now providing for retirement through employer-sponsored plans, those in 'less expensive' employer-sponsored plans, and those in 'more expensive' plans.(6) All, of course, contribute to the C/QPP.

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(6)For purposes of this table, data on employer and employee contributions to employer-sponsored pension plans were used to construct two 'composite' plans. The plans were constructed by estimating total contributions by and on behalf of two groups of employees - each constituting roughly half the 3.9 million plan members in 1976. The results for those in 'less expensive' and 'more expensive' employer-sponsored plans should be interpreted with care since they reflect the average experience of those in the groups rather than the experience of individuals. In Table 14, the derived average employer and employee contribution rates are used to illustrate the situation for hypothetical individuals at various earnings levels. The assumptions concerning the extent to which enlarged mandatory arrangements would displace private arrangements parallel those detailed in the note to Table 13.

Table 14

Estimated Contributions Made by and on Behalf of Employees at Four Earnings Levels to Current Earnings-Related Pension Plans and Contributions Required for an Enlarged Mandatory Plan (Total Contributions as a Percentage of Employee Earnings)

	Non-Member of Employer Sponsored Plan				Member of Less Expensive Employer-Sponsored Plan				Member of More Expensive Employer-Sponsored Plan			
	(employee earnings level in relation to average wages and salaries (AWS) 1977)											
	0.5 AWS	1.0 AWS	1.5 AWS	2.5 AWS	0.5 AWS	1.0 AWS	1.5 AWS	2.5 AWS	0.5 AWS	1.0 AWS	1.5 AWS	2.5 AWS
Current contributions to earnings-related pension plans (including C/QPP)	3.1	2.3	1.5	0.9	7.8	7.5	7.2	6.9	12.1	12.1	12.0	11.9
Full cost contributions to enlarged earnings-related pension plans	10.0	11.2	11.6	7.0	10.5	11.7	12.2	9.9	12.1	13.3	13.8	13.0
Increase in contributions required for enlarged earnings-related plans	6.9 ($455)	8.9 ($1,175)	10.1 ($1,990)	6.0 ($1,990)	2.6 ($175)	4.2 ($555)	5.0 ($990)	3.0 ($990)	0 (0)	1.2 ($155)	1.8 ($360)	1.1 ($360)

The table shows that an enlarged, mandatory earnings-related pension plan which covered earnings up to 1.5 times average wages and salaries would entail a substantial increase in pension contributions by and on behalf of those employees not now participating in an employer-sponsored pension plan and not saving privately for retirement. For this group, costs would increase by between 6 and 10% of their earnings. If these increases were split between employers and their employees, each would face increased pension costs of between some $225 and $1,000 annually depending upon the level of the employee's earnings. These increases are of particular relevance to smaller employers, and their employees, since many such employers do not now offer employer-sponsored pension plans. The increases are smaller for those who now belong to employer-sponsored pension plans (or who make comparable contributions to RRSPs), since it is assumed that a part of those contributions would flow to the enlarged mandatory plan. The right hand section of the table indicates that for those now in more expensive plans, an enlarged mandatory pension plan of the kind described would, on average, entail little if any increase in contributions. It is important to note that a significant part of the estimated cost increases is the result of the higher contribution rates associated with the existing C/QPP.

Table 14 underlines the fact that the adoption of an enlarged mandatory earnings-related pension plan would, assuming that the full costs were being levied, entail substantial increases for those making no provision for retirement beyond the C/QPP. Under these circumstances, consideration would have to be given to methods that would moderate these increases for those with low incomes. There are, in general, two approaches to providing such relief. The first is to subsidize the pension contributions of those with low incomes either directly or by raising the exemption level of the C/QPP (that is, increasing the level of earnings on which contributions are not paid, but benefits are). The second approach would be to design the earnings-related plan so that neither contributions nor benefits were paid in respect of the first several thousand dollars of earnings. Under this approach, the subsidy received by low-income people would come not through the earnings-related plan, but through the GIS. The cost figures presented above do not allow for either of these approaches.

V. WOMEN AND PENSIONS

The present retirement income system provides inadequately for women. This is evident from the fact that women constitute a very high proportion of the poor among the current elderly. The shortcomings of the employer-sponsored pension system - its incomplete coverage, its poor treatment of short-service employees, the inadequate adjustment for inflation and the inadequacy of marriage-related pension provisions - affect women as a group more severely than men.

The adoption of any of the four options for reform of the earnings-related pension system outlined above would significantly improve the retirement income system. Under Options 1 and 2 the focus is on improving the allocation of pensions through measures that would maintain real values, provide for earlier vesting and updated deferred pensions, require survivorship provisions and split pension credits on marriage breakdown. Given the labour force and demographic characteristics of women, the adoption of each of these measures would benefit them as a group more than men. Options 3 and 4 would not only improve the allocation of pensions through measures similar to those noted above, but would increase the size of the pension system. As a result, those in middle-income groups during the working years would be more or less as well off after retirement as before; this result would, of course, apply equally to men and women.

Each of the four options for reform would benefit women as a group. The same general conclusion applies to the suggestions made with respect to the GIS. If more resources were channelled to GIS recipients who lived alone in unsubsidized rental accommodation, a large majority of those who would benefit most would be women.

The report canvasses other measures directed to improving the retirement income position of women that have been proposed. The splitting of all pension credits of married people as they accrued, for example, would ensure that each marriage partner would be directly entitled to about half the earnings-related pension the other accrued. This measure would change the allocation of pension income but would have little effect on the total amount of pensions-in-pay. Another measure - paying spouses of plan members pensions based on the member's earnings - would change the allocation of pensions, but also has the potential of increasing the size of the system as well. A broadly similar result would be achieved if, instead of concentrating on earnings-related pensions, pension reform were based on increasing the flat rate OAS or amending it so that women received somewhat higher OAS benefits to compensate for years when they were not eligible to contribute to the C/QPP.

VI. FAIRNESS BETWEEN GENERATIONS

If a retirement income system is not, and is seen not to be fair in its treatment of successive generations, it will be changed sooner or later. This section examines this aspect of the fairness of the existing retirement income system and of an enlarged mandatory system.

A host of considerations, many of them immeasurable, lie behind the notion of fairness between generations. Two can be identified that have relevance for pension policy - the size and nature of the pension promises and of the capital stock (roads, buildings, plants, etc.) that one generation passes on to the next. Today's working generation plans what tomorrow's pensions and capital stock will be; and, of course, today's working generation is tomorrow's older generation. While today's working generation can plan to receive pensions of a particular size and kind tomorrow, it is tomorrow's working generation who will more or less determine the pensions that are paid tomorrow. Thus, if the per capita capital stock tomorrow's working generation inherits is small, and the pension promises are large, the chances that the planned pensions will be paid are reduced. This means that it is in the interests of today's working generation to behave in a way that will enhance the probability that their pension expectations will, in fact, be honoured by the succeeding generation.

This reasoning suggests two guidelines for the working generation to follow. Firstly, the working generation should pay the existing elderly more or less the same pensions it itself wishes to receive. If this guideline is followed, each successive working generation is sure, if not of the pensions it will receive, at least that the size and nature of its pensions will reflect what the next working generation wants for itself. Secondly, the working generation should ensure that the capital stock it passes on is not impaired so as not to reduce the capacity of the next generation to pay the expected pensions.

While these guidelines may seem somewhat theoretical, they do shed some light on the fairness of the current retirement income system; they also would help to promote fairness between generations in the context of the adoption of an enlarged mandatory pension system.

With respect to the current retirement income system, there is no evidence that pension plans - public and employer-sponsored - have significantly reduced the size of the capital stock from what it would otherwise have been. The 'fairness guidelines' then can be reduced to asking whether the next generation of elderly (the current working generation) will be relatively better off than the current elderly. When the first C/QPP pensions were paid in 1967, none were paid to the then elderly. This suggests that the elderly of the year 2000, who will have benefits from these plans, will, as a result, be better off than the current elderly -many of whom have no C/QPP pensions or only partial ones. The fact that the GIS and other income-tested programs were introduced at the same time as the C/QPP or shortly thereafter, mitigates this conclusion somewhat, since the benefits the future elderly will

receive from these income-tested programs will be relatively smaller than those disbursed today. But the decline in the size of the income-tested programs will be smaller than the increase in the size of pensions from the C/QPP. This leads to the conclusion that, at least insofar as public pensions are concerned, the future elderly will be relatively better off than the current elderly. Following the guidelines outlined above, this suggests that, on the grounds of fairness between generations, the well-being of the current elderly should be improved.

Should it be decided to improve the position of the future elderly through the adoption of an enlarged mandatory pension system, the above guidelines suggest that, firstly, careful consideration be given to a parallel improvement in the position of the current elderly and secondly, that special attention be given to ensuring that the capital stock of the nation is not impaired. If it were decided to enlarge the pension system through an expansion of the OAS, the current elderly would benefit to the same extent that the present working generation expects to benefit - an outcome that is fair between the generations. If, on the other hand, an enlarged mandatory earnings-related pension system were decided upon, the treatment of the current elderly raises more questions - it is more difficult to pass on immediately such pensions to the current elderly. No prescription is offered here except to note that if a very rapid phase-in of an enlarged earnings-related pension scheme is not regarded as feasible, other devices exist to enhance the well-being of the current elderly. Of course, both a rapid phase-in of earnings-related plans and the adoption of other programs for the elderly would entail costs beyond those cited earlier - costs which would have to be borne, at least in part, by the current working generation.

VII. FINANCING PENSIONS

A. Public Pensions

Of Canada's three principal public pension programs, two - the OAS and the GIS - are financed on what is sometimes referred to as a pay-as-you-go basis; each year's benefits are financed by taxes levied in that year. The third program, the C/QPP, is earnings-related and contributory in character. The C/QPP are 'partially funded' pension plans. Benefits are paid for by contributions and by the income contributions earn; but the plans are not 'fully funded' since the present contribution rates are below those required to cover all of the cost of the benefit entitlements.

Some observers argue that the C/QPP should be fully funded so that those who ultimately receive the pensions will have paid for them through annual contributions. Without explicitly setting aside funds for the purpose, it is argued, national saving levels and the stock of the country's capital (its plants, roads, schools and so on) will be lower than otherwise. It is also argued that artificially low C/QPP contribution rates constitute an inappropriate intergenerational transfer from which high-income earners will eventually reap more benefit than will low-income earners. Proponents of full funding also argue that the present low C/QPP contribution rates can, as with the under-pricing of other goods and services, distort decisions.

Many other observers doubt the wisdom of fully funded public pension plans. As discussed earlier, they maintain that the existence of a large public pension fund has little to do with the capital stock, arguing that the size and nature of the capital stock are determined by a wide range of other factors. Full funding has also been opposed on the ground that no other country fully funds its public pension plan and that for Canada to do so would, in a short time, put governments in the position of having direct or indirect control over a very large proportion of the nation's capital assets. Some observers maintain that the funding debate is irrelevant; they regard the C/QPP in much the same light as the OAS - a pension system based on transfers of resources from the younger to the older generation. The growth of public pension systems over the last few decades is regarded by these observers as a straightforward substitution for the declining role played by intra-family transfers.

The arguments for and against full funding of the C/QPP boil down to a question of whether higher contribution rates should be charged now or later; if some funding is desired, its extent will depend on the rapidity with which higher contribution rates are phased in. The report does not suggest a specific course of action in this regard, but does argue that the partial funding of the CPP should be continued and, therefore, that in the near future contribution rates should be raised gradually. The more quickly contribution rates are raised, the larger the fund will become and the more important it is that some portion of the fund be invested through capital markets.

B. Employer-Sponsored Pensions

In the employer-sponsored pension system, there are two financing issues of particular importance.

The first relates to flat benefit plans. Plans of this type, as a group, have large unfunded liabilities. This suggests that the benefits of members of such plans may be less secure than are those of members in other types of plans. The funding of flat benefit pension plans should be reviewed.

The second issue relates to procedures often adopted under public employer-sponsored pension plans. The retirement income system would be improved if these plans followed the accounting format of private sector plans, and if public sector employers invested at least a part of their employee pension funds through capital markets.

VIII. AGE OF ENTITLEMENT TO PENSION BENEFITS/RETIREMENT AGE

The issues surrounding the age of retirement have been receiving much attention recently and will likely continue to do so in view of the prospective increase in the proportion of the population aged 65 and over. As a Senate Committee is now examining these issues, this section deals only briefly with two points - the undesirability of reducing the age of entitlement to public pension benefits, and the desirability of increasing employees' choice as to the time they permanently withdraw from the labour force.

The age of entitlement to public pension benefits has been 65 for almost a decade. While there are frequently calls for its reduction, these are not supported by the Task Force report. Had OAS benefits been available at age 60 in 1977-1978, the cost of the program would have risen from $3.7 billion to well over $5 billion. Had the age distribution expected in 2031 applied in 1977-1978 and had benefits been available at age 60, the OAS costs would have been more than $10 billion. Lowered ages of entitlement to the other public pension programs would, of course, have added to these costs. Thus, reductions in the ages of entitlement are very costly and will become much more so in the future. The report argues that if there is a public willingness to enlarge the pension system, a higher priority should be attached to increasing the pensions of those aged 65 and over than to extending the present system to those who are younger.

There have been recent suggestions that the age of entitlement to public pension programs be increased. While the report does not support these suggestions, it does argue that consideration be given to a system under which increases in the ages of entitlement to public pension programs would, under certain circumstances, occur automatically.

The report makes two suggestions with respect to the age of entitlement to public pension benefits. Firstly, since there is evidence that the incidence of chronic unemployment and disability is high among those in the 60 to 64 age group, consideration should be given to extending benefits similar to OAS/GIS to the chronically unemployed and disabled in this age group. Secondly, efforts should be made to increase the range of choice available to older employees regarding their retirement age; making provision for actuarial increases in OAS and C/QPP benefits to those who delay their receipt beyond age 65 would provide more choice to retiring employees. Elimination of mandatory retirement practices would have a similar impact. The report offers no firm conclusion on this second matter, given the Senate Committee's work in the area.

IX. THE TAX-ASSISTED SUPPLEMENTARY PROGRAMS

Contributions to Registered Pension Plans, Registered Retirement Savings Plans, and other similar vehicles, are deductible within limits for income tax purposes. There are three major difficulties with these limits - their level, their inflexibility and the variation in access to tax deductibility allowed those in similar circumstances.

The RPP benefit limit for defined benefit plans now allows tax-deductible status to employer-sponsored pension plans that pay (indexed) pensions the initial value of which is up to $60,000. When account is taken of survivorship provisions, and of early retirement provisions, the discounted value of such pensions can easily exceed $1 million. While the pension is, of course, taxable in the hands of the recipient, such arrangements, given their deferral aspects, reduce government revenue. This amount of tax deferral is large.

A second problem is that contribution limits to registered retirement income plans are, in general, annually based - contributions not made in the early working life cannot always be 'recaptured' later.

A third problem is that widely different limits can apply in respect of individuals at the same income levels depending on whether they are employed by others or self-employed, and, if employed by others, whether the employer offers a pension plan. The annual limits are as low as $3,500 for some and over $9,000 in respect of others.

The adoption of a comprehensive deduction ceiling which increased with the age of the contributor would assist in the solution of each of these problems. While the approach is not without difficulties, both substantive and administrative, it is regarded as the best of the available alternatives. The report suggests that the approach be given detailed consideration.

The report also suggests that consideration be given to the establishment of a new retirement income vehicle - the Registered Employee Pension Fund (REPF). While similar to RRSPs, REPFs would differ in that employers would be allowed to make tax deductible contributions and in that employer and employee contributions would be locked-in until, say, age 60. The REPF would be similar to a money purchase RPP except that employers would have no responsibility or involvement other than to send their monthly cheque to the financial intermediary designated by the employee.

X. FEDERAL-PROVINCIAL RELATIONS

The federal and provincial governments each have important powers with respect to the pension system. As a result, the development of Canada's pension system has required the cooperation of all 11 governments. Whatever the nature of the reform pursued, federal-provincial cooperation will continue to be required.

The federal government, through the Old Age Security Act, is responsible for the OAS, the GIS and the Spouse's Allowance program. It also regulates employer-sponsored pension plans subject to federal jurisdiction under the authority of the Pension Benefits Standards Act.

Provincial pension benefits standards legislation establishes the supervisory environment for a large majority of the employer-sponsored pension plans in the country. The similarity of the provincial and federal legislation has facilitated the development of a uniform supervisory environment. A number of provinces also influence the circumstances of the elderly through supplemental income-tested programs described earlier.

Each level of government has responsibilities with respect to the CPP. While the CPP is federal legislation, its substantial amendment requires, besides the agreement of the federal government, the agreement of two-thirds of the provinces having two-thirds of the total population. One province, Quebec, operates a pension plan, the QPP, comparable to the CPP.

The nature of these arrangements makes clear that each level of government has important powers with respect to both the public and the employer-sponsored pension systems.

Federal-provincial consensus would be crucial to the success of any pension reform. Without it, the present nationwide aspects of the pension system would be jeopardized. If reform were to proceed along the lines of any of Options 1, 2 or 3, amendments to provincial and federal pension benefits standards laws would be required. If the amendments were to be uniform, as is highly desirable, extensive consultation among the governments concerned, and a willingness to compromise, would be required. Option 4 would involve an expansion of the CPP and QPP (perhaps with provision for contracting out); the legal requirement in the CPP for a federal-provincial consensus for changes to that statute has already been noted.

Amendments to federal and provincial pension benefits standards legislation would also be required in the case of the various government measures to facilitate the maintenance of real pension values.

XI. CONCLUSIONS

Two main objectives appear to underlie the involvement of government in the retirement income system. The first is the alleviation of poverty among the elderly; the second is to help and/or require people to allocate appropriately their lifetime income, and hence consumption, between their pre-retirement and post-retirement years.

These two objectives do not define what is meant by 'alleviation of poverty', nor do they specify what is an 'appropriate allocation' of lifetime income and consumption. On the latter point, the report suggests an appropriate allocation of lifetime consumption is one that - by and large - enables people to maintain the same living standards after retirement as before. On the former, the report makes use of the several poverty lines that are commonly employed in this country.

There is an important link between these two objectives. If the pre-retirement living standards of middle-income families can be more or less maintained after retirement, either through personal saving, employer-sponsored pension plans or public pension plans that are not income-tested, then the income-tested programs designed to alleviate poverty among the elderly will be concentrated mainly on those who had low incomes in their pre-retirement years - the mentally or physically disabled, the chronically unemployed and other disadvantaged groups. But if the living standards of those with middle incomes during their working years are not preserved after retirement, then the income-tested pension programs designed to alleviate poverty will continue to apply to many in this group.

A. The Alleviation of Poverty

There is a high correlation between being old and having a low income. The average after-tax income of those 65 and over is 40% of that of middle-aged families. With adjustments for wealth and for family size, the economic position of those over 65 remains very substantially below that of middle-aged families. Among the elderly there are more women than men; and among the single elderly women, incomes are about 15% lower, on average, than they are for single elderly men. Thus, many of the elderly are poor, and elderly women are, on average, poorer than elderly men.

The Old Age Security and Guaranteed Income Supplement benefits, in conjunction with supplementary programs in some provinces, establish the minimum level of income guaranteed to the elderly. Measured against the commonly used poverty lines, these minimum-income guarantees are too low for single-rate GIS recipients. It is not necessarily the case, however, that all single-rate GIS recipients have equal needs. Rather, it is those who live alone in rented accommodation without housing assistance whose living standards are generally the lowest. There are many elderly widows in this group. If additional resources are to be devoted to the current elderly, and the case for such action appears strong, an effort should be made to channel it principally to those in this group.

The effectiveness of public pension programs in alleviating poverty among the future elderly will be affected by the larger role to be played by the C/QPP and by the evolution of OAS and GIS benefit levels. If the present relationship of OAS and GIS to average wage and salary levels is maintained, the combined benefits of the future elderly from these two programs and from the C/QPP would leave them better off, in comparison with the non-elderly, than is the case today. But if adjustments to OAS/GIS benefits in the years ahead reflect only increases in prices, and exclude real per capita economic growth, the gap between the per capita incomes of the elderly and non-elderly will likely be no smaller than it is today. Moreover, because poverty is essentially a relative phenomenon, if the guaranteed income provided through the GIS takes no account of per capita economic growth, increasing proportions of the elderly will fall below the poverty lines of the future.

B. The Maintenance of Living Standards

The present heavy reliance of the elderly on the GIS (55% of OAS recipients), the large proportion of the elderly who have little or no replacement income and data showing a sharp drop in the disposable incomes of middle-income couples when they retire, all suggest that many of the current elderly experienced a serious decline in living standards when they retired.

The maturation of the C/QPP will increase the amount of retirement income available to the future elderly. But the C/QPP are intended to replace only 25% of pre-retirement earnings up to the level of average wages and salaries. Assuming the OAS continues to play the same relative role in the future as it does now, the OAS and C/QPP together will not maintain the living standards of those who were middle-income earners during their working years. The maintenance of living standards of this group would require replacement income, in addition to the OAS, of between 40 and 45% of average lifetime earnings up to 1.5 times the level of average wages and salaries. Much of this will come from the C/QPP. But evidence suggests it is unlikely that sufficient income from investments and from employer-sponsored pension plans will be available to fill the gap between what the public programs provide and what is needed for the maintenance of living standards. It has been estimated that between one-third and one-half of the current working generation having incomes in the middle ranges will encounter significant reductions in living standards when they retire. On this basis, it is concluded that the system, as it is now constituted and expected to develop, will not generate adequate amounts of retirement income.

C. Allocation of Benefits in Earnings-Related Plans

Apart from deficiencies in the amount of replacement income, the allocation of benefits from earnings-related pension plans raises troubling questions. In employer-sponsored plans short-service employees, and those with interrupted careers, are treated badly. Delayed vesting provisions, inadequate adjustment of deferred pensions, the limited application of transfer-of-funds portability and multi-employer plans,

and plan provisions which enable long-service employees to retire before normal pensionable age on an unreduced pension, all have the effect of providing much higher 'returns' to long-service employees, for every dollar of pension contribution made by or in respect of them, than to short-service employees and to those with interrupted careers. Women generally, and low-income earners of either sex, are particularly likely to be hurt by these plan provisions.

The allocation of benefits, and the well-being of pensioners generally, are also influenced substantially by differences in plan design that stem mainly from the varying capacity of employers and employees to enhance, through their pension plans, the well-being of those who have retired. Where this capacity is slight (mainly among smaller and medium-size employers selling in highly competitive markets), employer-sponsored pension plans are likely to resemble group saving devices; where it is greater (mainly in the public sector and among some large corporations), pension plans are likely to involve direct transfers from one generation to another. In effect, some groups of employees are 'insured' against an uncertain future because of the taxing or market powers of their employers; a great many others do not have such insurance.

This difference manifests itself most clearly now in the 'indexing' issue. Since most employers are unable to bear the risks indexed pension plans entail, the result is that some pensioners are protected from inflation and others are not - an outcome that is clearly unfair. The report concludes that the incomes of all of the elderly need to be substantially protected against inflation.

Finally, three features of the retirement income system serve to allocate pension income between spouses in an inappropriate way. Current survivorship provisions in the C/QPP do not treat spouses equally; many employer-sponsored plans lack adequate guarantees for survivors; and pension credits in employer-sponsored pension plans are not split on marriage breakdown. Women, of course, are most adversely affected by these deficiencies.

D. Options for Reform of the Earnings-Related Pension System.

An important question facing policy-makers is whether reform of the earnings-related pension system should concentrate on improving the allocation of pension benefits among plan participants or whether measures should be adopted that would, as well, increase the size of the pension system.

The report outlines four options. In comparison with current arrangements, Options 1 and 2 would provide better portability, some measure of protection against inflation and better treatment of the spouses of plan members. Employers would continue to be able to choose whether or not to offer a pension plan. Since it is unlikely that the aggregate amount of pensions flowing from an employer-sponsored pension system reformed along the lines of Option 1 or 2 would increase significantly, if at all, the principal effect of these options would be to produce a fairer allocation of pension benefits.

Under Options 3 and 4, the mandatory earnings-related pension system would be expanded using employer-sponsored or public plans. For those in the middle-income ranges during working years, these plans, together with the existing OAS and C/QPP, would more or less maintain pre-retirement living standards. The allocation of pension benefits would also be improved. The adoption of Option 3 or 4 would mean increased pension contributions for many employers and employees - particularly for those employers not now offering and for those employees not now members of employer-sponsored pension plans. Those now contributing to such plans or otherwise providing for their retirement would, assuming the mandatory plans displaced a significant proportion of these arrangements, face smaller increases in pension contributions, or none at all.